

VALLEY FARMER

NORMAN J. COLMAN, EDITOR AND PROPRIETOR.

BENJ. BRYAN, PUBLISHER.

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ADDRESS, BENJ. BRYAN, PUBLISHER,
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OAT CULTURE.

MR. N. J. COLMAN, Dear Sir: I am but a young farmer, and therefore beg you will excuse me for asking a little information from you in relation to the culture of oats. For three years past, I have tried to raise good crops of oats, but have failed every year. How shall I cultivate them so as to get a good crop? How many bushels of seed shall I sow to the acre?

Yours with respect, N. D. S.

[REMARKS.—If we knew how our friend had cultivated the crop, we could better tell where he had failed. Oats succeed better at the North than here, though if planted very early in soil adapted to this crop, they succeed well here. Our correspondent has probably not sown his seed early enough. The ground for this crop should be plowed in the fall, and just as soon as winter breaks, a heavy harrow should be put upon the ground, so as to make it mellow, and the seed should be sown. The forepart of March is the best time for sowing the seed, and we

have seen it sown early in February and fine crops raised. If the seed is sown late, and the heat of summer comes rapidly on, the plants are forced up to an early maturity before they have time to spread, and the crop will be light. There may be a large growth of straw; but the seed will be light. By planting early, they have a cooler and longer season to mature, and the crop of seed will be much heavier.

The quantity of seed sown to the acre, varies—some sowing five pecks and some five bushels to the acre. We sow from two to three bushels to the acre, and believe a larger yield can be obtained from this amount. Farmers should conduct experiments as to the quantity of seed to be sown to the acre of all kinds of grain. It is a matter of a good deal of importance to know how many bushels of wheat, rye, oats, barley, clover, timothy, &c., should be sown, and by measuring off several lots of one or two acres, and trying various quantities of seed upon them, and measuring the yields from these various lots, it could soon be ascertained which is the proper quantity of seed to sow. This will be a good experiment for the conductors of our new Agricultural College, when it shall get under way, which we hope will not be long, and we especially commend the subjects of seeds and seeding to their early consideration.

Farmers do not cut their oats early enough. They wait till the straw turns yellow. This is wrong. As soon as the seeds pass from the milky to the doughy state, the crop should be cut. The seed will be heavier, as is the case with wheat, and the straw will be greatly improved. Indeed, if cut at this time and harvested without unnecessary exposure, we had as soon have the straw for fodder as hay.

We have heard of a fall or winter kind of oats that succeeds better in a warm climate than our common varieties, but have never been able to procure any of the seed.]

**Essay on the Culture and Management
of Tobacco.**

BY L. J. BRADFORD, OF AUGUSTA, KY.

[Concluded.]

The curing process is one of the most important in the future value of the crop, and too much care cannot be given it, a small neglect lessening the value of the crop seriously. If the weather is dry and the tobacco is not too much crowded in the house, the action of the atmosphere, assisted by a small portion of fire, will be sufficient to effect the object. If, however, the weather is warm and damp, the atmosphere will not aid very materially in curing the plant, and unless firing is resorted to, the plant is certain to be more or less injured. It is always safer after a house is filled with green tobacco to rely upon the action of the fire to a considerable extent. These should be small and slow at first, and continued so until the tobacco is clear of the moisture engendered by the fire—is dried out—and then increased until the leaf is nearly cured. When this is the case, the fires should be suffered to go out, and the tobacco be suffered to come in case or get soft again. The quality of the article will be improved by permitting it to come in case once or twice before it is thoroughly cured in stem and stalk. Dry and sound wood is best for firing. If the object of the planter is to make a piebald or fancy article, care should be taken never to permit the leaf to get very soft during the curing process; and to make a really fancy article, the tobacco must be thoroughly yellowed before, and cured entirely by fire. This particular description is, however, not more desirable or valuable to the consumer, as the essential properties of the plant are frequently destroyed by the action of the fire. As a general thing, it is better to cure the weed by a natural process of air and the action of atmosphere, and where the planter is provided with a sufficient quantity of room to house the crop without crowding too close, the object can be attained without the aid of much fire, and the wood and danger of burning the crop saved, and in some markets increase the value of the crop.

Having now arrived at the time when it is supposed the planter has secured and cured the crop, we proceed to give some directions in its future management and preparation for market—remarking that many, after all their previous

care and labor, lose its profits to a good extent by either a want of knowledge of its management, or a carelessness which is inexcusable upon their part.

After the tobacco has been thoroughly cured in stem and stalk, it is then ready to commence stripping or taking the leaves from the stalk. In this process the plant first passes through the hands of the most experienced laborer on the farm who takes off the bad or injured leaves and ties them neatly in bundles of eight or ten. The plants that are thus culled are given to others who strip off the remaining leaves, and tie them in bands of six or eight leaves, wrapping tightly and neatly with the tip of the leaf used as a tie, so as to form a head of one and a half to two inches in length. Care should be had to make the bundles as uniform in size and color as possible, as it adds to the beauty of sample by which it is to be sold. When the day's work is done, let the tobacco, neatly pressed through the hands, be put in a winrow, as it is termed, viz: laid straight in a bulk or pile of sufficient length to hold the day or two day's work, and only the width of one bundle and one-half; reversing each course so as to have the heads of the bundles out. Here it may remain until stripping season is over or the crop is stripped. The first good drying spell of weather after the stripping get the smoothest and smallest sticks upon which the tobacco was hung and hang up the tobacco to dry, carefully shaking it out when hung so as to secure a uniform drying. When the weather again becomes moist enough to bring the tobacco in case, take it down and carefully bulk it away as before directed, only taking more care to straighten the bundles and make the bulk much wider; this is done by lapping the bundles over each course similar to shingling a roof, the bulker having his knees upon the bulk, carefully laying down the tobacco as it is straightened and handed him. When the bulk is finished, weigh it down heavily with logs or some heavy weight. Care must be taken that the tobacco does not imbibe too much moisture, or get too high in case before it is bulked, as it will injure. So soon as the tobacco becomes soft enough to handle without breaking, it may be put in bulk, and should the stems break a little under the pressure of the bulker's knee, no material damage will be done, provided the leaf does not crumble.

A little attention will soon teach the most ignorant the proper order for safe-keeping. The tobacco will be safe in bulk, and wait the planter's convenience to prize it in hogsheads.

In prizing, the different qualities should not be mixed, and if the planter has been careful to keep them separated, no trouble will be had in assorting them when ready to prize. In packing in the hogsheads, care should be taken to have every bundle straight, and every leaf to its bundle. From a well packed hogshead, any bundle may be drawn without injury or interruption to the others. The usual way of packing is to commence across the middle of the hogshead, placing the heads of the first course of bundles about eight or ten inches from the outer edge and running the course evenly across; the packer then places the bundles of the next course in the same direction, the heads against the side or edge of the hogshead, and follow the circumference until the heads of the two courses come in contact; after that course is completed, he finishes the other side by placing the heads against the cask as before, so as to have three courses across the cask, the bundles all laid in the same direction, and the next layer is reversed, carefully placing each bundle as it is thrown or handed him. When filled, it is subjected to the press or screw and forced down. Our hogsheads are from forty-four to forty-eight inches across the head, and fifty-eight inches in length, and from 1,800 to 2,000 pounds can be easily prized in them. If the tobacco is large, rich and oily, the harder it is pressed the better, and the better price it commands. These remarks are particularly applicable to those heavy descriptions of tobacco known in Virginia as heavy shipping leaf, and in the West as Clarksville tobacco, where the soil and climate are peculiarly adapted to the production of this description of tobacco. In climates not so well adapted and soil of a different character, the same variety of weed will assume a different character, being of a finer or coarser texture, as the case may be; light and bulky, and destitute of oil and substance. Tobacco of this description should be managed as before directed, but prized lightly in the casks so as to admit of a free and open leaf, such being mostly required for cigar leaf. The writer has been a close observer of tobacco sales for several years, and has seen a difference of two to five dollars per cwt. produced in crops grown on adjoining farms cultivated in the same manner, and sold on the same day. The buyer must take the tobacco as it comes from the planter's hand; he can use only a certain part of it per day. That in safe condition he can keep for future use, and is always willing to pay for it full market rates; that out of condition he

must keep until he can use it; and if he considers his interest, buys at what it will be worth to him when he shall be ready to work it up, thereby throwing on the planter the injury and loss in the tobacco from the time of purchase to that of manufacturing. This loss is considerable.

The planter has to bear it; it is right that he should. He has no cause to complain of the manufacturer; if he feels like doing so, let him come here in September or October, and walk into one of our large factories, and take a look at a hogshead then being pulled up, bearing his own name on its head, which he sold in the spring. We presume he would then feel rather sympathy than blame for the manufacturer, and congratulate himself that he and that tobacco parted long ago. But planters can remedy this evil.

It is useless for them to talk about bad seasons for striking, bad winds, cold winds, too much or too little rain, &c. This will not exonerate them from the duty they owe themselves.

These bad seasons are not universal. They do not affect every planter; when they do we shall believe them. There are planters who always manage their crops properly, in defiance of too much season, too little season, or any season at all. They are men of reputation as planters, and will do all they can to sustain it.

Examine their crops year after year, and they will invariably be found in good condition, and will always bring the highest prices.

Augusta, February 2, 1863.

BEE HOUSES.

One of our subscribers, J. M. Brasfield, of Pleasant Home, Mo., wants some information in relation to Bee Houses. He wishes to construct one. Any of our readers who have them, and have used them successfully, will confer a favor by giving the plan of its construction.

We think, however, that if Mr. B. builds one, he will soon abandon its use. We know of none now in use. They have generally been abandoned, and are not recommended by our apriarians. When the moths get into them, as they will, it is impossible to expel them.

The best way to keep bees, is in hives. And these should not be put in houses or under sheds; but they should be scattered about as widely as possible. The moths then do not prove so destructive. Where the hives are all at one point, the moths congregate and prove far more destructive than when the swarms are scattered.

Quantity of Seed to be Sown to the Acre.

ED. VALLEY FARMER: I am but a beginner in farm life, and shall be compelled to rely upon you, to a considerable extent in conducting my farm operations. If not too much trouble, will you tell me the quantity of seed that should be sown to the acre of the various crops raised upon the farm. I wish to lay in my supply of seeds, now, while I have leisure, and desire to know the usual quantity sown. **A BEGINNER.**

[**REMARKS.**—“A Beginner” is beginning right. When farm work is pressing in spring, there is no time then to look around for seed. Now, when there is abundance of leisure, is the time to determine what crops will be raised, and to procure the best quality of seed. Only the best seed should be sown. In our statement of the quantity to be sown, we have reference to clean, pure seed. Our estimate will be for broadcast sowing. When drilled in, a little less quantity is used.

Wheat, about two bushels per acre. Rye about the same quantity as wheat, or a little less. Barley, about two and a half bushels. Oats, three bushels. Corn, in hills, about five or six quarts. Buckwheat, about one bushel. Potatoes, in drills, about ten bushels. Beans, in drills, one to one and a half bushels. Sorgum, two to three quarts. Timothy, one-half bushel. Red Clover, one peck. Blue grass, two bushels of 14 pounds each. Flax, one peck, if raised for the seed alone; and one to two bushels if raised solely for the fibre.]

THE CHARM OF COUNTRY LIFE.

Ike Marvel, who is a practical farmer, as well as a most eloquent writer, thus talks in his new work, “My Farm of Edgewood.”

“The greatest charm of a country life seems, to me, to spring from that familiarity with the land, and its capabilities, which come only from minute personal observation, or the successive developments of one’s own methods of culture. I can admire a stately crop wherever I see it; but if I have directed the planting, and myself applied the dressing, and am testing my own method of tillage, I look upon it with a far keener relish. Every week it unfolds a charm. If it puts on a lusty dark green, I see it is taking hold upon the fertilizers; if it yellows in the cool nights and grows pale, I betheink me, if I will not put off the planting for a week in the season to come. If it curl overmuch in the heats of later June, I reckon up the depths of my plowing; and when the spindles begin to peep out from their green sheaths, day after day, and lift up, and finally from their feathery fingers shake down pollen upon the

silk nestling coyly below: I see in it all a modest promise to me—repeated in every shower—of the golden ears that shall, by and by, stand blazing in the October sunshine.”

[If all our farmers could look upon farm life with as much philosophy, what a sum it would add to the happiness of mankind! If they would examine as carefully into the causes of their successes and failures, in what an age of improvement we should live! And yet every farmer should do so. He should watch with an unceasing vigilance the products of his labors. He should see into the causes of his failures and successes, and in future take lessons from his experience. His life and his practice then would be a continual progression. But most farmers having eyes, see not—and ears, hear not—and judgments, exercise them not. They look upon farming as a sort of routine, in which there can be no progression or improvement. There was never a greater mistake! But the scales are gradually falling from the people’s eyes, and they are waking up to the importance of exercising more judgment in farm culture. Let the ball keep moving.—ED.]

Starting Farm Life in the Woods.

ED. VALLEY FARMER: Allow me to give you a brief sketch of my novitiate as a pioneer and a farmer. I am not sufficiently versed in the science of the sanctum, to presume upon the public (pardon the discrimination).

But my object, dear sir, is to call your attention and your benevolence to the poor laboring classes of our closely populated cities—the draymen, the honest daily laborers, the closely housed clerks, salesmen, &c. &c. Those who wear away a short, but toilsome existence, without the least conception of the satisfactory freedom and independence consequent to the life of the farmer.

Give an intelligent member of either of the above classes, a year’s experience in the country; put him upon a small tract of land of his own; let him feel that it is his own—his all—and that every lick there made, enhances its value—and that he is his own master, overseer, employer, and all: I say, give him a year’s taste of all this, accompanied with a true appreciation of its significance—and I will wager my humble judgment, that he would not return to his old situation, with treble its former salary.

At the age of thirteen, I was placed at the desk of a business house in the city of Louisville, Ky., there to remain for eight years, learning and seeing but little outside of the

counting office. My health in the meantime gave way, and I was advised to try the country.

Having inherited a tract of land in this (Livingston) county, I determined to move upon it. So in the fall of '60, in company with my wife, two children, and a manservant, I came here, and, to my great surprise, I found the land covered with heavy timber, and that closely crowded with undergrowth. This, I must confess cooled my ardor. I hesitated. Misgivings and disappointment, coupled with the knowledge of my inexperience, redoubled upon my desponding spirit. I asked myself—Was my exchequer and my health sufficient for the task? My buildings were all to erect; provisions, implements and stock to purchase. Was it not enough to discourage a novice? But, suffice it to say—the application, perseverance and industry, to say nothing of the order, I had acquired in the counting-room, came to the rescue of my former determination—and, to-day, I have comfortable hewed log buildings and fifty-five acres in cultivation.

The system of clearing practiced in this country, is to shrub off the undergrowth even with the surface of the ground, chop down the timber one foot in diameter and under, and girdle the remaining trees. This method of clearing is not approved of by many; but it has its advocates, and I am one. But I cannot give my reasons here, as my letter is likely to be longer than I first intended.

To return to our subject: The first season—that of '61—I managed to get up two comfortable log buildings, and clear and fence fifteen acres of land. Five acres I put in tobacco and ten in corn. I received, in return for my labor, 340 bushels of corn, and 3,500 lbs. of tobacco. After cutting off my tobacco, I put three acres of the land in wheat. I cashed my tobacco; the corn lasted until my second crop was gathered.

During the winter of the second year, that of '61 and '2, twenty acres were cleared. This I put in corn; six acres of my first clearing put in Irish potatoes, and six in tobacco; the remaining three acres, as above stated, were put in wheat. The products were as follows: 29 bushels wheat, 840 of corn, 760 of potatoes, and 5,600 lbs. of tobacco.

This year, or season, I hired an extra hand; and this year, as you see, I got back every cent I expended the year before, which was the last red I had in the world.

Last winter—that of '62 and '3—twenty acres more were reclaimed. But the drouth and early

frost cut short the crops in many parts of our county near two-thirds; in fact, many of our planters did not cut their tobacco, and but little corn gathered but what was frosted. So far as I am concerned, I shall not clear expenses.

Now, sir, I have to some extent given you a detailed account of a forester's life; a life that costs but little actual cash to maintain, and is one that is accompanied with all the comforts, and far more freedom, independence and satisfaction, than can possibly be enjoyed in an humble or even a third-rate position in any of our cities.

My employers were men of no small business capacity. They were successful wholesale drug gists, &c. I was allowed, at times, to make suggestions, and my opinion was often asked and taken. I believe I received the entire confidence of my employers. My salary was more than my necessaries demanded, with a liberal share of pleasure as well as luxuries; and on the day I took my leave of the firm, the senior complimented me thus: "Sir, I regret this occasion—your place will be hard to fill—let your past be your future guide, and you are bound to be successful." Yet I cannot say that I would exchange, or rather re-exchange positions.

Good tobacco and wheat land can be had here (in the woods), for \$4 and \$5 per acre. A substantial and comfortable hewed log building, costs from \$30 to \$50, according to style and finish. Land can be cleared, according to style given above; rails made, and fence put up (if hired), at a cost of seven or eight dollars per acre. Our tobacco (in hands), potatoes and wheat, are cashed on delivery at the river bank, 5 miles distant.

Now, sir, if you approve of the above, will you be kind enough to give us an editorial on the subject. I read my *Valley Farmer* regularly and feel that I could not well do without it. Yet I must say that I have seen but little in it that would aid a man beginning as I did—everything from the stump. I am acquainted with many young men, as well as middle-aged, who would willingly make the change, were a few commonplace hints thrown out to them, backed by as many practical ones; and I have heard it said that such men often make the most practical and scientific, as well as successful farmers we have. With this, sir, I shall close.

Respectfully yours,
W.M. SANSBURY.
Carrsville, Livingston Co., Ky.

CRACKS IN Cows' TEATS.—These are easily cured, by rubbing molasses on the teats for a few days after milking.

SPRING WHEAT.

One of our subscribers in S. E. Missouri states that the season was so unfavorable the past fall on account of drouth, we believe, that scarcely any wheat was sown, and wishes to know if spring wheat cannot be raised as a substitute, and desires information on its proper culture. We have mislaid our correspondent's letter, and give the substance of it from memory.

In this climate, we cannot recommend the culture of spring wheat on a large scale. The crop is too precarious. If the seed is sown very early, in soil well adapted to wheat, and the season is favorable, a fair crop may be obtained; but in not more than one season in three can such a result be expected.

The soil should be prepared for spring wheat the fall before seeding. It should be plowed deeply, say to the depth of ten or twelve inches, and the ground left as rough as the plow will leave it, for the action of the frost. In February, if the weather will admit, give the ground a thorough harrowing, and sow the seed. If the ground is left lumpy after the harrowing, rolling it is desirable. About one and one-half bushels of seed to the acre, is the proper quantity to be sown.

We believe our correspondent desired information in regard to varieties. A good many kinds are highly commended in more northern climates—but in good seasons they succeed well here. The Fife, the Canada Club, and the Rio Grande, are well spoken of. Our readers will have to try for themselves, if they would find the kind best adapted to their soil and locality.

Spring wheat should be cut early; just as soon as the grain passes into the doughy state. Being left standing longer than this, it is sometimes ruined.

But we wish it distinctly understood, that we recommend raising winter in preference to spring wheat. Yet where winter wheat has not been sown, and spring wheat can be got in early, a good crop may be raised, if the season is favorable.

PRACTICAL.—To be practical, is well. To be only practical, is not to be happy—is not what the Creator designed. He made the flowers as well as the grain; ornament as well as utility. The practical has no smile; it only tugs. It is the pack-horse, the slave; not the free, happy citizen, who sees pleasure in a sunset as well as in a green field—who reads a poem as well as an essay on plowing. God designed man to be happy—not a plodding slave, an acetic.

The Leaf Tobacco Tax.

A meeting of the receivers and exporters of Western leaf tobacco was held in New York last week, at which Mr. Joseph Fatman presided. Its object was to affirm the inexpediency of the excise tax of twenty cents per pound on leaf tobacco, as recommended by the Commissioner of Internal Revenue, with no drawback on exports. It was asserted that the statistics of American and foreign tobacco, the experience gained by long dealing in the article, and especially the result brought about by the high prices of leaf during the past two years, prove that such a tax would not only injure but almost annihilate the export of the American product, resulting in great loss to the agricultural, mercantile, and shipping interests of the country, and benefiting alone the foreign growers of tobacco, and would tend to throw the balance of exchange more than ever against the United States to the great detriment of our national currency. The meeting also expressed the belief that the injury to the trade of the country would more than counterbalance the revenue obtained from the proposed tax, which was inexpedient in every point of view. A committee was appointed to visit Washington, and consult with the Committee of Ways and Means, laying before them such facts and statistics on the production and export of leaf tobacco as will best serve the object of the Government and interfere least with the interests of trade and commerce. The co-operation of the trade of Louisville and other cities was invited, and we are happy to know that this important subject is attracting the deep attention and consideration of our citizens who are interested in this branch of business.

Planting Potatoes Under Straw.

ED. VALLEY FARMER: I would reply to your Belleville correspondent, for "R.M." who is getting his toes frozen at the Normal this winter, that to cover potatoes with straw is a very good plan, for we have tried it—though they do not keep as well as when raised in earth. I say we have tried it, but only on a small scale, say in quarter acre patches, for by this time our straw runs out. To cover an acre with straw from 8 to 10 inches deep, is beyond the ability of any farmer in this region, saying nothing about several acres. Besides this, the labor required in getting out so much straw, is very great. Only on the prairie regions, where straw is plentiful, is such a plan practicable—here it is wholly out of the question.

I think it is a fact that a climate so warm as this, is not most suitable for potatoes. Those raised around Chicago are much better than those raised here—and raised in Wisconsin, better still. The best potatoes coming to the New York market, are from the cold "Blue Nose," region of Nova Scotia—which is at least 300 miles north of this.

N. G. M.

TOOLS FOR THE BOYS.

When we visit a farm, and see everything around the premises neat and tidy, we immediately conjecture that its occupant has a supply of tools, and probably a tool-house in which to spend the rainy days in making repairs, and adding conveniences to the house, barn or farm. When we see gates well hung, plows, harrows, cultivators, harnesses, &c., all in good repair, we lay it all to the fact that the farmer has tools, and the *will and intelligence* to use them. There is not one farm in a dozen that we might visit, that we could not, in a few minutes, give a pretty good *guess* whether the owner had a supply of good tools or not. If we saw things going to ruin generally, we should say he had no tools.

It is astonishing how useful tools are about a farm—how many jobs of work can be done with them, without sending off for a mechanic—how many hours can be profitably spent when work could not be done out-doors—and in how much better repair a farmer will keep his premises with them than without them.

But we commenced this article to urge the importance of having tools for the benefit of the boys. They are highly imitative. They can generally do things that they see others do. Their mechanical powers get exercised, they get used to tools, and become sufficiently proficient to make almost anything needed on the farm. And then when they become farmers on their own hook, they will make much more inventive, tidy and prosperous farmers. They can put their hands as well as their brains to work. We have seen such a great difference in farmers who have been brought up used to tools and those who have been brought up without them, that we do urge very seriously the importance of obtaining a good supply of all kinds of tools, and of having a good house to use them in. You can't invest money to better advantage than to have them.



A SUPPLY OF WOOD.—Reader, have you a supply of wood for the ensuing year, cut up at the proper length, and snugly packed away in the wood-house? If you have not, you should lose no time in procuring it. The busy season of farm life will soon be upon you. You will then have no time to send to the woods for firewood, or to cut it up at the door. Labor is scarce and high, and you should get everything done you can, so as to devote all your time to your crops. It is the very best economy to lay in firewood in winter, and let it season so as not to be compelled to leave pressing work to procure it.

KEEP STOCK OFF THE MEADOWS.

Many meadows are seriously injured by stock in the spring months. They are permitted to run upon them when the frost is leaving the ground, which is soft and easily cut up by the hoofs of horses and cattle. The scanty picking they get will not begin to compensate for the damage they cause the meadow. When the ground is soft, as it always is in spring, stock should be carefully excluded. It is also very bad policy to pasture meadows in the fall.—Every sprig is generally eaten off, and the ground and roots are left cold and naked. If the growth after cutting the grass had been left, it would have acted as a mulching, keeping the roots warm and uninjured by the severity of winter. A good coating of aftermath laying upon the ground all winter is equivalent to a covering of snow, which all know to be highly beneficial to land.

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[Written for the Valley Farmer.]

IMPROVE YOUR TALENT.

We are taught in Holy Writ to improve our talents. "But," says one, "I have no talents to improve. I can't make a speaker or a statesman." This is just the misfortune of your humble servant: but is every man to be a speaker or a statesman? We answer, No. For who would build our houses, and who make our furniture, build our railroads, our ships that plow the mighty deep, and last (though not least), who would till our prairies so vast in extent, thus giving us the means by which our lives are prolonged? Then, shall we bury our talent, because we cannot make an eloquent speech or guide the ship of state.

Having borrowed a few numbers of your paper a few nights ago of a neighbor, I see that all of the agricultural talent is not buried. Yet, in traveling in the West, I see a great deal of talent unimproved in an agricultural and horticultural point of view. But, Mr. Editor, perhaps you don't believe this while you are seated in your sanctum. If not, I will prove it by the following substantial witnesses: An onion bed full of parsley; a beet bed full of ragweeds; a parsnip bed full of smart weed; a cabbage patch in the same state of cultivation; a corn-field with an old broken fence, full of everything but corn; a hog-pen in the yard, and a hen-house up stairs; a miserable old swag-roofed stable, standing between two huge monuments of manure; and between the dwelling house and road are many more such examples.

Now, I have no desire to bury my tal-

eat in my early days, lest I could not find it in maturer years; and as I have but one talent, I want to improve it all I can under the circumstances; at the same time assisting others; and I know of no better way than to give my experiments through your excellent paper, at the same time reading the experiments of others in it.

There seems to be a go-ahead disposition in this part of Suckermom—right or wrong, without any or few experiments! Now, I think that experiments founded on philosophy will pay in this country. Why do not the agriculturists and horticulturists give more experiments, with the results, through agricultural journals?

I enclose one dollar for your excellent paper for 1864.

YOUNG MAN.

[Your head is all right, young man. Keep doing. You should not only avoid burying your talents, but you should assiduously cultivate them. No crop will improve more under cultivation than *brains*. They will yield a rich harvest with proper treatment.—*Ed.*]

Cultivation of Tobacco in France.

DIRECTIONS FOR SOWING THE SEED.—Tobacco should be sown in nursery beds, and transplanted in rows in the field, in order to be able to give it the care from day to day, which it so imperiously exacts. As it is to be set out in the month of May, and should at that time have acquired sufficient development to be safely transplanted, the seed must be sown in a bed having heat enough to promote its rapid development. The work is begun so late in March as to be beyond danger from farther frosts.

A bed a rod in length and four feet eight inches wide, is large enough to produce 15,000 to 18,000 plants, for which about 7 ozs. of seed will suffice. The bed is made of horse and cow manure mixed, thus giving less heat than if of the former alone, but continuing the heat for a longer time. A warm and well sheltered position is chosen, in land rather dry than moist. The upper soil is first taken off, and if rich and of good quality, is laid aside. The excavation is then continued to the depth of 14 inches; filled with the manure fresh from the stables and mixed before putting in, and carried to such a height that when well settled it will be 14 inches in front and 18 inches at the back, above the surface of the ground. The frame is then put on, and the manure covered with say six inches of good rich earth, with that taken out at the top of the hole, which latter we suppose to be rich itself, and the sashes are then put in place.

The bed should be thus prepared during the first days of March. In the latter half of the month, the seed is sown, distributed uniformly over the surface, not buried, and simply watered with a pot having a very fine rose. The sash is replaced and scattered over with a little litter to lessen the action of the sun's heat, and every two or three days the bed is watered with water warmed in the sunshine. In eight or ten days

after sowing, the young plants appear and weeds with them. As soon as they are strong enough, the bed is weeded by hand, which operation is repeated as often as necessary. Air is given to the plants as they grow larger, and they are thinned out where too thick.

PLANTING OUT.—The soil chosen, should be new, of good substance, and deep, plowed before winter sets in. It is leveled by thorough harrowings in spring, and spread with "60,000 to 70,000 kil. per hectare" (say 25 to 30 tons per acre), of good farm-yard manure as fresh as possible, turned under to a moderate depth with a plow. A third plowing is then given, four inches deeper than the last, to keep the manure between two layers of soil. Sometimes also a fourth plowing is given just before planting out, but this is most frequently useless.

In planting, the lines left by the last plowing may serve as a guide, or the field may be harrowed and marked off. The plants in the bed, by the first of May should have attained a height of three or four inches, with four to six leaves. The day before they are transplanted the bed is watered so that the smaller roots may not be injured, in which one will easily succeed with a little attention, if the soil is in part composed of vegetable mould. The rows are laid off 28 or 30 inches apart, or if not marked, they may be placed at every third furrow as left at the last plowing. The plants are 24 inches apart in the rows, or, if the land is very rich, 28 inches apart.

The planting out should be done in cloudy weather, threatening rain. In the South of France, where irrigation is common, a good watering is given after planting. The plant is growing in eight or ten days, and the first cultivation is given with the horse-hoe. A fortnight later a second cultivation follows, and after a short interval farther, a slight hilling up.

While these operations go on, the young tobacco plant rapidly develops; it has reached a height of 20 to 28 inches, and has formed along its stem as many as twelve new leaves. The topping then takes place, which consists in cutting off the crown, before the appearance of the flowers, just above the eighth leaf in the North, and the tenth or twelfth in the South. This leads after some days to a shoot in the axil of each leaf, and these shoots are also pinched off like the tops, as soon as they reach a length of an inch and a half. The sap which still seeks growth, continues to push out either a new terminal shoot or more axillary shoots; and the planter, on his part, must not cease to combat this disposition to shoot, by new and severe pruning. The sap is compelled by this continual exercise of care, to take refuge in the leaves first produced, and they are thus gorged until they sometimes reach a length of over thirty inches and a foot in breadth. Plants grown for seed need neither be headed nor deprived of leaves. They had better be planted in another field.

Tillage is continued at intervals during the month of June.

TAKING IN THE CROP.—The time of harvest is shown by the yellowish tint assumed by the leaves and the penetrating odor they emit. The

lowest leaves are first taken off, as soonest ripened, and forming the lowest quality. When this is done, the intermediate leaves are gathered, constituting a second quality. By this time the upper leaves have completed their maturity; they are gathered last and rank as the best in quality.

As soon as the harvest is thus terminated the stems should be cut off at the ground, which they would otherwise exhaust by suckering, and a deep plowing follows at once to bury the stems and destroy the roots.

The tobacco leaves, as they are taken to the drying house, are laid on the ground in lots of ten or twelve, with care not to mingle the different qualities. After three or four days they have lost a part of their moisture and are sufficiently wilted to be exposed to a current of air. They are then strung by means of a large needle passed through the midrib of the leaf at its base, on strong twine which is stretched upon nails or hooks in the drying house in several regular tiers. The air does the rest. The drying houses are ordinarily simple sheds open to every wind.

TREATMENT OF MEATS.

The editor of the *Iowa Homestead* recommends the following recipes as being first-rate:

PICKLE FOR HAMS.—For 100 lbs. of meat, take 9 gallons of water, 9 lbs. of salt, half fine and half coarse, 3 lbs. of brown sugar, 1 quart of molasses, 3 ounces of saltpetre, 1 ounce of potash. Put the above ingredients into a kettle and boil it, taking off the scum. As soon as the scum ceases to rise, take it off, and when cold, pour it in the barrel on the meat. The meat should be rubbed with fine salt before packing in the barrel. By adding a few ounces of whole black pepper, cloves, allspice and cinnamon, a superior flavored ham is obtained. The spices should be added to the brine after it is skimmed, and boiled a few minutes. This is also an excellent pickle for beef.

PICKLE FOR BEEF.—To eight gallons of water add two pounds of brown sugar, 1 quart of molasses, four ounces of saltpetre, and fine salt until it will float an egg. Beef put up in this way will keep good without absorbing so much salt as to make it hard and tough when cooked

To MAKE THE BEST SAUSAGES.—30 lbs. of chopped meat; salt, 8 ounces; pepper, 2½ ounces; 2 tea-cups of sage, and 1½ do. of sweet marjoram. Pass the last through a fine sieve. If you prefer it, thyme and summer savory may be substituted for the latter.

PRESERVING SAUSAGES.—After the sausages have hung three weeks in a dry, moderately warm room, pack them in a box or eask between layers of clean, dry oats. In this way they will keep dry and moist until into warm weather. Keep the box in a cool, dry place.

KEEPING MEATS FRESH.—With a little care all kinds of fresh meat—pork, beef, poultry, fish, &c., may be kept for a long time without losing its fresh flavor. Cut the meat into suitable

pieces for cooking, whether for steaks, baking, or boiling; then lay it where it will freeze hard. When frozen, place it in a tub or box and bury it in snow or ice, with a temporary covering to keep it from melting in ordinary winter weather. If a thaw comes on, cover with an old blanket or straw to exclude the air.

PRESERVING HAM.—Salt down your ham as usual. When the salt has drawn through, take it up and smoke it moderately. Then cut in slices; boil five minutes, and pack in a jar. Pour hot lard over it till covered. It will stay there, fresh and sweet, the year round, if you wish. When wanted, remove the lard from the top, and your slices are ready cut for the pan.

CORN FOR FODDER.—Plow and manure your land well and then make a broad, shallow furrow, by going both ways with a small plow, and then sow the corn liberally in the furrow. Five or six rows ten rods long each, we should think would require half a bushel of seed. The common yellow or white flat southern corn, such as may be found at any of the grain stores, is the kind mostly used. It should be sowed quite thick or it will grow so stout that the cattle will refuse to eat it. It is a very difficult crop to dry sufficiently for winter use, but with favorable weather may be cured by allowing it to wilt for a day or two after cutting, then tie in small bundles near the top, and hang upon the fences or poles laid up for that purpose.

How to Stop the Flow of Blood.—Housekeepers, mechanics, and others, in handling knives, tools, and other sharp instruments, very frequently receive severe cuts, from which blood flows profusely, and oftentimes endangers life itself. Blood may be made to cease to flow as follows: Take the fine dust of tea and bind it close to the wound; at all times accessible and easily obtained. After the blood has ceased to flow, laudanum may be advantageously applied to the wound. Due regard to these instructions would save agitation of mind, and running for the surgeon, who would, probably, make no better prescription if he was present.

BEE MOTH.—*Ed. Valley Farmer:* You may tell Mr. Barr, who inquired in your January number, that I have not found by raising the bee gum from the platform, that the bee moth is kept out. It will give the bees a better chance to pull them away; also the moth will fall off the board in trying to find a hiding place. I have tried it for two or three years. First, in driving nails at the corner, letting them stay out about $\frac{1}{2}$ of an inch, so the moth can raise itself up again, as it would do in case the box or comb came down on the platform. Know of no preventive against the moth. G. DREW.

Bunker Hill, Ill., Jan. 10, 1864.

OIL OF PUMPKIN SEED.—One gallon of seed will give about half a gallon of lamp oil, and it may be used as olive oil. It is pressed like flax seed.



Missouri and Illinois Wool Growers' Association.

We have taken steps to organize a Wool Growers' Association, by the above or some other name. There will be a meeting of wool growers for that purpose, in St. Louis, on Wednesday, the 17th day of February.

We have spoken to a number of gentlemen engaged in raising wool, upon the subject of organizing such a society, and they are warmly in favor of it, and promise to be present at the meeting.

Missouri and Illinois are largely interested in the production of wool and mutton, and an association of this kind, where the wool growers can get together and discuss the merits of the various breeds of sheep, and the best methods of management, as well as the best means of ridding the State of those pests to the wool grower—sheep killing curs; of the propriety of washing sheep before shearing; and of urging the importance of the same protection to wool-growing that wool manufacturing receives—we say that such an association can be productive of an immense amount of good to the sheep interests of the Great West.

Much of our produce in the West has to depend upon an Eastern market for sale, and while it costs, to ship it to New York or Boston, 80 per cent. of the value of corn, 50 per cent. of wheat, and 20 per cent. of beef and pork, it only costs 4 per cent. of the value of wool—thus demonstrating, that, for shipment, it is the most profitable production of the farm. And when we get manufacturers in the West, as we shall at some future day, this per centage will be saved.

We hope all interested in sheep will attend the meeting on the 17th inst. Those coming from a distance, will learn at the office of the *Valley Farmer*, 97 Chestnut street, where the meeting will be held. Will not all our readers who feel interested in this important subject, and who desire to promote the wool growing interests of the Great West, give us their hearty co-operation and presence?

SELECTION OF COWS.

POINTS INDICATIVE OF GOOD MILKERS.—THE AYRSHIRES.

There is much remissness on the part of farmers in the selection and feeding of cows. They do not devote that time and attention to studying economy in the selection and feeding of stock that its importance demands. It is much better for a farmer to keep one good cow that will produce eighteen or twenty quarts of milk a day, than to keep two cows that will produce only the same amount of milk daily. For it costs, generally, more to feed two mouths than it does one, and aside from keeping, the care is just double. So it is very evident that true economy lies in getting the best breed of cows.

What is desired in a breed, or in an animal expressly for dairy purposes, is a system which shall readily and naturally convert food into milk, rather than into fat and muscle; for it is evident that by no means can the food be converted into milk, and form fat at the same time.

It has been remarked that milking and fattening properties are antagonistic. This is true to a certain degree, yet not to such a degree as to prevent our seeking a breed which shall readily take on flesh and fat when not required to convert its food into milk.

It has been proved that no better stock for the production of milk can anywhere be found than some of our native stock. But having no fixed traits which descend to their progeny with an approximation to certainty, it is evident they cannot be relied on to furnish a sufficient number of milkers. There is no doubt, however, that by judicious management in selecting and breeding, that a dairy breed from a native stock alone without the introduction of foreign blood, could be produced that would yield double, or even treble, what the general run of native cows do now.

In the introduction of foreign breeds of neat stock, there has been but little attention paid to systematic breeding with primary reference to the dairy, compared with the pains taken to improve breeds for beef.

There are certain marks which indicate a system in which we may confidently expect a free secretion of milk. Mr. Faxon, a writer of discrimination, says: "The points to be attended to in judging of a good milch cow, are, by universal consent, considered to be the shape and size of the animal both as a whole and in detail; development of the lactiferous parts; temperament or habit of body and disposition; and finally, strength and endurance of constitution.

A maximum development of these points marks out a first-class cow of the breed to which she belongs."

An important point in a milch cow is, that her skin should be loose, without being flabby, and should spring when pinched with the forefinger and thumb; this indicates that she is in a healthy condition, and a kind feeder. In selecting cows for the dairy, get those that handle well, as the skin is a true index of the milking properties of a cow.

Another important point is, the mammary glands running on each side of the belly should be large throughout their whole course. It is an important sign, because when this duct is large, it may be safely assumed that all the secretions of the animal are large, and of milk among them. The thigh veins should also be large and easily felt with the hand.

Another very essential sign, is a capaciousudder. It should be large backward as well as upward between the hind legs and forward on the belly; also broad in front, filling up the space between the flanks, but rather short vertically. It would be useless for a cow, however able and well disposed, to make much milk unless a sufficient reservoir to contain it all was provided.

In judging of a cow, we would also look out for a mild eye and a placid expression of face.

The more mild and quiet a cow is, all things else being equal, the more milk she will make.

There is a great difference in cows as regards their dispositions and a corresponding difference in their effects on the systems of the animals.

Of two cows, the one with the amiable cast of countenance will eat quietly the year round and chew her cud in peace, and will make much milk; while a bright-eyed, smart, excitable looking animal will worry and fret the flesh from off her bones, and oftentimes neglect her own food to fight with a neighbor for an outlying lock of hay.

For purely dairy purposes, the Ayrshire cow deserves the first place. They may not afford so large a quantity of milk as many other breeds, but for the amount of food consumed it is generally conceded that they will give a larger return of milk than a cow of any other breed. In remarking upon the characteristics of the Ayrshires for dairy purposes, Sandford Howard, of the *Boston Cultivator*, says: "Whether the Ayrshires are judged by their actual produce or by the external points which by experience and observation are acknowledged to denote dairy qualities, it must be admitted that they take a high rank.

From a fair consideration of their merits, it is believed that their adoption for the dairy would secure the following advantages over the stock commonly kept for that purpose in this country:

"1st. A greater quantity of milk, butter and cheese for the food consumed.

"2d. Greater uniformity in the general character of the stock from its inherent or hereditary qualities.

"3d. Better symmetry and constitution, and greater tendency to gain flesh when not giving milk."

In consequence of her small, symmetrical and compact body, combined with a well-formed chest and a capacious stomach, there is little waste, comparatively speaking, through the respiratory system; while at the same time there is very complete assimilation of the food, and thus she converts a large proportion of her food into milk.—[Ex.]

HOVEN IN CATTLE.

It is often the case that when cattle obtain access to young and succulent clover or grass, when they are hungry, that they will fill themselves to such an extent as to cause a fermentation in their stomachs which forms a gas, causing a swelling and pressure on the stomach, and unless immediate relief be given, death will generally ensue. In some cases this disease is brought on by their eating greedily of roots or corn, which will ferment. When cattle get into this condition, it is called "hoven" or "blown."

There are two ways of relieving it. First, if the animal is at the point of death, a knife can be plunged into the paunch, on the left side, midway between the hip-bone and the rib. But this mode should be the last resort, and only practiced in extreme cases. A very good way to relieve the animal is to put a tube down the throat into the stomach, thus allowing the gas to escape. But a good and simple method, is to put a gag into the animal's mouth, and keep it open. Take a short piece of wood, about the size of a hoe-handle, tie a string at each end, put it into the mouth, and tie the string behind the horns. This will cause the animal to occasionally wheeze and bring up more of the gas, which will cause a great relief. Another, and some think a better method, is to put a twisted straw or hay rope, as thick as a man's wrist, in the animal's mouth, bridle fashion, drawing it up tight and tying it securely on the back of the head, behind the horns. This will cause the animal to open its jaws, and the efforts exerted in so doing produces an action of the muscles, relaxing the valves as it were, and liberates the gas.

SCRATCHES ON HORSES.—Wash with Castile soap-suds, and rub thoroughly dry. Then apply glycerine. A few applications will cure the most obstinate cases. We tried a number of approved remedies, but could not effect a cure till we used the glycerine. It worked like a charm.

CURE FOR SCAB IN SHEEP.

For the benefit of Wool-Growers, I send you a recipe for the cure of scab—which has been used with great success in this county. It has the advantages of being cheap and not injuring the constitution of the sheep, or persons applying it, besides being a sure cure.

The recipe was procured by a shepherd of this county, from his father in Ireland, who has charge of about 600 sheep there.

Recipe.—To 1 gallon of Tobacco-water or Salt-brine, add 1 ounce of Corrosive Sublimate; 1 oz Sal Ammoniac; 1 oz. Arsenic; $\frac{1}{2}$ oz. Blue Stone; $\frac{1}{2}$ gill Oil Vitriol; 1 gill Spirits of Turpentine.

The compounds to be dissolved in boiling water; the Oil of Vitriol to be added when the liquid is cold, and the Turpentine just before using. If a person has many sheep to doctor, he should have a yoke to hold them. A very simple one is a forked post, the fork about two feet above the ground, with a pin through.

Before applying the medicine, the sheep, when diseased badly, should be scratched with a long-toothed curry comb, or scarified with a knife.

One man pours on the medicine while another rubs it in, with his hands well greased. A person's hands would get sore in time, if not greased.

To make a sure cure, the sheep should be gone over a second time, after an interval often days.

For snake bites, we scarify the wound, or where swollen, and put in salt, and seldom lose a sheep when taken in time.—[Cor. Stock Journal.]

GARTEN IN COWS.—Garten is a troublesome complaint. It affects the udder, and produces a morbid action of the system, but more particularly of the secretory and lactescent glands. If taken in time, common linseed oil rubbed carefully over the teats and udder, will effect a perfect cure. In stubborn cases, from two to three applications may be necessary. As a preventive, a few doses of saltpetre, per month, administered in dough or mash—a tablespoonful at a time, is highly valuable.

THE PROFITS OF SHEEP HUSBANDRY.—In sheep growing, there are three distinct sources of profit sought, viz: Increase of number by actual propagation, growth of increase in size and in weight, and the annual product of wool. The ewes used in breeding should possess as nearly as possible, the points of excellence desired in the offspring; they should at least be two years old, of good strong constitution, well fed and well sheltered. Such ewes, with such management, will generally realize the fond hopes of the shepherd for increase. Growth afterward is natural, easy and rapid. The product of wool depends much upon the health of the sheep, both for strength and beauty of fiber, and weight of fleeces.

LIGHT FLEECES.

Farmers complain that the fleeces of wool clipped this season are much lighter than an average, and far below what they were last year. There are many anxious inquiries in regard to the cause of this—more we presume than there would have been had wool commanded only its former prices. Prominent among the causes of this uniform lightness of fleece is the fact that sheep were not kept as well through the winter and spring as usual. Barley, corn, and other grain brought a high price, and farmers thought they could not afford to feed it to sheep, so they sold the grain, kept their sheep on dry forage alone, and as a consequence, got from three-fourths to a pound less wool per head than they would if they had pursued an opposite course. By feeding barley to their sheep, it would have brought them more than two dollars per bushel, but they probably "couldn't see it" then, and if they do now, it may possibly teach them a good lesson. We have here another evidence in addition to those mentioned a few weeks since, that feeding grain pays.

Use of Salt in the Food of Cattle.

The following are extracts from recent prize essay on common salt, by Dr. Phipson, of England, lately published in the *Mark Lane Express*:

The use of salt, in the food of cattle, must not be looked upon as a direct producer of flesh, so much as a necessary element of the economy, without which animals are apt to perish from disease, but with which the body is kept in a healthy and normal state. Not many years ago, a German agriculturist, Uberacker, brought forward an experiment which is in direct accordance with this opinion. Wishing to obtain some exact notion of the influence which salt exercised upon his sheep, the flocks of which lived upon a low, damp pasture-land, and received habitually a certain dose of salt, he fixed upon ten sheep and struck off their usual allowance of salt.

This remarkable experiment was continued for three years, with the following results:—In the first year, five of the ten died of rot and worms; in this year, the remainder of the flock, 450 head, lost only four sheep. The second year, a new lot of ten sheep, deprived of salt, lost seven individuals; the remainder of the flock, 364 head, lost five only; a little later, the other three died also from diarrhea. The third year was very rainy. Sixteen sheep were selected, and deprived of salt. The whole of them died in the course of the year of rot and vermicular pneumonia.

In the Brazils and Columbia, flocks may be annihilated by being deprived of salt. M. Garriot, member of the Agricultural Society of Lyons, assures us that the milk of cows subjected to a daily allowance of salt is richer in butter and

cheese than when these same cows are deprived of salt.

Sir John Sinclair, to whom agriculture owes much useful information, has observed that the habitual use of salt has a marked influence in improving the quantity and quality of sheep.

Many English agriculturists have proved, by direct experiments, that a regular distribution of salt to cattle is especially useful in preventing hoove (meteorization), caused by feeding cattle with leguminous vegetables. And there exists no doubt among those who have tried it, that when employed in proper quantity, it increases the appetite, stimulates digestion, keeps up the normal supply of salt in the blood, improves the wool or hair of the cattle, prevents disease, and, moreover, enables the agriculturist to fatten cattle upon food which they would not enjoy without it were previously mixed up with salt.

But there is another important consideration with regard to the regular distribution of salt to cattle, namely, its influence in preventing disease. Its daily use becomes of serious consequence when flocks and herds are menaced with those epidemic attacks which too frequently ravage a whole country at once, when a proper use of salt would either prevent them entirely, or at least reduce them to less disastrous proportions.

During one of these epidemics, which sprung up about the year 1840, in the east of Europe, the almost wild cattle of the Uharine, Podolia and Hungary, were struck down in much greater numbers than those of Silesia and Bohemia, where the cattle breeders habitually distribute salt to their beasts. Advancing towards the West, this scourge diminished in intensity, and finally ceased to show itself in Germany, where particular care is bestowed upon cattle, and where salt has been for many years constantly employed.

In Great Britain, in the best farmed districts, we find the allowance of salt oscillating around the subjoined figures, taken as a center of basis:

ALLOWANCE OF SALT PER DIEM.

Calf, six months old,	. . .	1 ounce.
Bullock or cow, one year old,	2	"
Oxen, fattening,	. . .	6 "
Milch cow,	. . .	4 "

Horses. — It is generally admitted, whatever salt forms habitually a portion of the horse's diet, that this animal amply repays the slight additional expense or trouble thus incurred. To mix salt with the food of the horse, colt, ass or mule, is a frequent practice in England and America. In these countries the usual allowance for a full grown horse of middle height, is about 2 ounces per diem. In Belgium, the quantity of

salt appropriated to a full grown horse by the Government is little more than 1 ounce per diem.

Sheep. — The Romans gave to their flocks of sheep, every fifth day, an allowance of salt amounting to about half an ounce per head; and this is precisely the quantity which is employed in England and Saxony daily, for sheep full grown and of ordinary size. Numerous experiments have proved that salt is more beneficial to sheep than to any species of cattle.

Pigs. — The best proportion to adopt as a basis appears to be; two-thirds of an ounce per diem for full grown pigs.

In administering salt, unless it be used as medicine, the more intimately it is mixed with the food, the better. This is not an easy matter with fodder, especially that which has been salted to preserve it, in which case we must endeavor to make a rough estimate of the amount of salt in a given weight of fodder, in order not to administer an injurious excess. In farms where oil or rapecake is given in powder, this being rather an indigestible food, the allowance of salt should be mixed with it in preference to any other fodder.

It should be borne in mind that an excess of salt is injurious to any animal; and that is why the preceding figures are given as a practical guide. An excess of salt produces irritation and inflammation of the mucous membrane, and causes several kinds of skin disease, especially in sheep. With horses an excess of salt has been known to produce dysentery; and in oxen diseases of the blood. Salt should never be given to cattle when a deficiency of food does not enable them to receive abundance of nourishment; in which case we excite appetite without satisfying it, and the animal loses flesh rapidly. Salt is to be prohibited, also wherever congestion of any important organ is observed, or where we have perceived inflammation of the bowels. In such cases we must not be guided by the instinct of the animals themselves.

In some diseases of the digestive organs, salt has proved beneficial. Thus, in cases of rot in the liver, accompanied by loss of appetite, palleness of the membrane, swellings under the throat, avoid ground which communicates the rot, and give the sheep five grains of iodine and half an ounce of the spirits of turpentine twice a day, and let them have free access to salt. And again, for the disease called "red water," a species of dropsy, give liberal supplies of food, a dry resting place and rock salt.

Considered as a medicine, salt purges animals at the following doses:

Horses,	. . .	8 to 10 ounces.
Oxen,	. . .	10 to 16 "
Sheep,	. . .	2 to 3 "
Pigs,	. . .	2 to 3 "
Dogs,	. . .	1 to 2 "

It becomes a poison at the following doses:

Horses,	. . .	2 lb.
Oxen,	. . .	3 lb.
Sheep,	. . .	6 to 8 ounces.
Pigs,	. . .	4 to 6 "



BREAKING COLTS.

One of our subscribers desires us to give the best system of breaking colts to harness. We have had the above cut made, which illustrates an excellent plan, particularly for colts that are vicious and intractable. The apparatus can be cheaply made. One can take the wheels of his wagon to use upon it. It will be seen that the colt can neither bite, kick, lie down, rear nor back. The straps and bars hold him up and hold him down, and prevent him from going to one side or the other. It is well to have one steady horse in the machine to aid in breaking the colt.

But no colt should be put in this machine, nor hitched to anything till it is handled more or less and taught that you are not going to hurt it. Kindness, gentleness and patience are the important requisites in breaking horses.—The colt should be rubbed all over, fed out of the hand, dallied with, and made to know that you are its friend. The harness should be put on, and he should be led and driven about till he gets used to it. Practice this two or three days, and then put him in the "Colt Breaker," and you can soon hitch him to anything. A little more care, patience, and judgment in breaking colts, and we should have fewer balky, kicking, and runaway horses.

BREAKING OXEN.

The editor of the *Massachusetts Farmer*, recommends the following method of breaking oxen:

When you first put a yoke on your two-year old steers, coax them with an apple or an ear of soft corn, (soft corn is allowable in this case). Then they will hold up their heads and be glad to follow you. No whip will be needed at the first yoking. Let the yoke and the soft corn be associated in their minds, and they will never be shy of the yoke; but if you make use of force alone, they will hold down their heads to keep them from the blows. After you have taught them to follow you around in the yoke, and that it will not injure them to carry it, you can hitch them on before the older oxen, and make them take the lead. The driver should go beside them occasionally, with a switch, stick or a light and short whip, but he will not have any need to beat them, except in extreme cases.

FEEDING SWINE.

Different experiments have been made in fattening hogs, but the one most deserving notice was in the State of Maryland. The Agricultural Society of that State instituted an inquiry into the relative merits of two modes of feeding, and the following is one of the results. On the first day of December, four shoats of the same breed nearly of a size, and as much alike in every respect as could be selected from a herd, were made choice of, each being carefully weighed, and placed in a single sty where their food could be exactly regulated. Two of them weighed together one hundred and eighty-five pounds. These were fed on one gallon each of shelled Indian corn, the gallon weighing seven pounds. This was the allowance for twenty-four hours, and as much water as they needed. The other two were fed on half as much by weight, of Indian meal made into hasty pudding, with a little salt. The seven pounds of meal when cooked weighed thirty pounds, and measured three gallons. Before the experiment had progressed a fortnight, it was perceived that the two fed on hasty pudding were outstripping the two fed on whole corn; and on the thirty-fourth day they were again weighed; the corn-fed ones together weighing twenty-five pounds more than they did on the first of December, while the two fed on mush—half the quantity—had gained forty-four pounds.

LIVE AND DEAD WEIGHT OF SHEEP.—The English rule is to weigh sheep when fasted, and divide the weight by 7 and call it quarters. Thus, a sheep weighing 140 pounds, would give 20 pounds a quarter as the dead weight. If the sheep are in good condition this rule is sufficiently accurate for all purposes. Poor sheep will fall below the mark, and extra fat ones go over it.

PROFIT OF SHEEP KEEPING.—The Waterville *Mail* says, Messrs. Doolittle & Hirton, at their excellent farm on Sandy River, keep a flock of four hundred very choice Merino sheep. We saw them last winter, and thought them the best managed flock we have seen in the State. We are told that \$1,600 worth of wool, and \$600 of sheep and lambs have been sold the past season—\$2,200 in all—while the flock has been kept good in number and quality. This is farming that pays.—*Me. Farmer.*

TO CURE JUMPING SHEEP.—A correspondent of the *Ohio Farmer* gives the following curious account of the method adopted by him to prevent his sheep from jumping the fences of his pasture: "I want to tell you about my jumping sheep and how I broke them. I got them in a pen built sufficiently to hold them; I then caught the ringleaders one at a time, and made a small hole in each ear. I then took a cord or string and run through the holes in the ears together close enough to keep them from working the ears; I then let them out and they are as quiet as any sheep."

Hints on the Care of Horses in Winter.

I. During the winter months, those horses which are used for labor should be well shod. Unless, however, they are to be driven in such places as render them very liable to slip, the corks should not be very sharp. When a horse is newly shod, be a little careful when you drive him, especially if he feels well, or he may "cork himself." Like men, it takes a few days for them to become accustomed to handling their feet with new shoes.

II. See that the stables in which horses stand are strong, and so arranged that they cannot kick each other. In cold weather, if they are well fed and do not work much, they kick and paw, or bite their mangers for exercise. It is not viciousness that makes them do it, but frequently a want of exercise. Often a valuable horse is badly injured just for want of proper arrangement of the stalls. A little expense today often saves a good deal to-morrow.

III. See that the floors are strong, and that the horse-barn is well banked up, to prevent the cold air from passing under the building and making the floor constantly cold. Every means ought to be taken to have the floor as warm as possible. A horse that has worked all day and has his legs wet, often takes cold because his legs are kept wet during the night, by a cold floor. Warm feet for horses is as important as for men.

IV. A horse's bed is of some importance. We know a good many farmers who allow horses to stand and lie on the hard floor all winter. They may get used to it, but what can be got used to is not always the best. A good bed of straw, or some similar material, kept clean by frequent changing, should be furnished to all horses. They will frequently paw it from under them, but this is for amusement, and not because they do not wish for a bed. When this is the case, pains should be taken to prevent it.

V. Always clean out the droppings of your horses, both morning and evening. They ought always to be so far removed from the stable that the air will not be poisoned by the emanations from them, or the sills and siding of the barn will be rotted by coming in contact with them. We have always thought the practice of throwing the manure into a heap by the side of the barn door slovenly, wasteful, and detrimental to the health of the horse. With a broom, sweep out daily all dust that accumulates.

VI. A horse should be groomed every morning when stabled. A good grooming is worth as much as half a peck of oats. Every barn should be supplied with a good curry comb, card, comb for mane and tail, brush, and stiff broom for that purpose. It keeps the circulation in the surface vigorous, keeps the skin clean, and in good condition to withstand both heat and cold, and makes the horse look very much better. An ungroomed horse is like an unwashed boy, or a person who never attends to his toilet.

VII. It is a question with some, whether a horse should be blanketed in the winter. If the stable is a good one, and sufficiently warm, we would not use the blanket, except when the

horse is out of doors, or has been subjected to severe labor or exposure. If it is used when they do not need it, it will do them little good when they do need it.

VIII. In a cold day of winter, when a horse's bits are full of frost, always warm them thoroughly before placing them in the mouth. Not to do this is very cruel. Touch your tongue, or even a wet finger to a piece of very cold iron, and you can appreciate the importance of this hint. It may be a little trouble to do it, but it should be done. The frost may be taken out conveniently by placing the bits in water.

IX. If you have no labor to perform with your horse, see that he has plenty of exercise daily. This is necessary to the health of the animal, as well as to his and your comfort.

X. Do not allow him to drink very large quantities of ice-cold water at once. Moderately warm water is best for animals, but a large quantity of very cold water is always injurious. Especially is this the case when they do not have moderate exercise immediately after drinking, or when the horse is warm or much wearied by hard labor.

XI. A horse's food can never be exactly measured to him. Sometimes he needs more than at other times. Give him as much as he needs, and exercise judgment in regard to the matter. At all times, give as much good, bright hay as your horse can eat. If the weather is very cold, the horse needs heat-producing material, and corn is as good grain as you can give. Grind it and feed it wet and mixed with a little cut hay or bright straw. When it is warm, oats is the best of grain for horses, and for laboring horses nothing is superior to it. Oats is to the horse what steak is to the laboring man; it furnishes the material for muscle.

XII. Young colts should not be stabled in winter, but protected from cold storms and winds by sheds, or be kept in unexposed situations. They need to be where they can move about as much as they desire. It gives them better constitutions and better locomotive power. Give them a little grain daily, and domesticate them by treating them kindly and handling them frequently.

XIII. Brood mares, unless they are worked, should be allowed to run out, except when the weather is severe. Give them plenty of hay, and a moderate allowance of oats. A few roots occasionally are good, but never feed frozen roots, or those very cold, to them or any animal. It is like putting so much ice into the stomach.

SHEEP SHEDDING WOOL.—Mr. Lewis Clark, in the Wisconsin *Farmer*, says the best plan to keep the wool on sheep is to keep them fat, and that if sheep "run down" from any cause, and are fed high at once, their wool will start. Even a change of pasture, from a poor to a timothy and clover pasture, will start the wool from a lean sheep. But the feeding of corn, beans, wheat, rye, barley, oats, vegetables, or anything that sheep will eat that makes fat, avoiding sudden changes, will not only cause the wool to stick, but will increase it more than enough to pay the additional cost.



HORTICULTURAL.

[Written for the Valley Farmer.]

FRUIT AND COLD WEATHER.

If extraordinary cold weather in the winter destroys the fruit of the coming season, we shall have neither apples, peaches, pears or any other kind of fruit next fall, for it has been colder here—at least 6°—than has ever been known before. But, for my part, I do not believe that simple cold weather will have this effect, even though the tree itself may be killed. It is the previous condition of the bud as regards development which decides this. I think that though all kinds of fruit trees are loaded with developed buds, still they were not enough so to be injured by the cold weather. However, we shall see.

By the way, it is not very unlikely that the cold has killed many fruit trees on the prairie, particularly the peach, and that after all Lower Egypt will continue to be the great peach growing region. For two years past peaches have done so well on the prairie, and last year better than with us, that "Rural" M. L. Dunlap, of Champaign, conveyed the idea that Pomona was likely to leave us and squat in Central Illinois. If she had any such intention, I think the weather which ushered in the New Year will make her hesitate at least, and perhaps cause her to hasten to a more favored clime.—But of all this, too, we shall see.

I was deeply pained, friend C., to see the obituary of your lady, in your last number. When I visited your house in November, and received from her hand the cup which "cheers; but does not inebriate," I did not dream, that on leaving, I should see her no more. With everything as regards an elegant home, both within and without, and within so short a distance of the social pleasures and advantages of the great city—with the beautiful family and all things so comfortable—it seems a pity that she could not have staid longer to bless and to enjoy. Your friends cannot assuage grief—time is said to do this. But we extend our sympathies, and we can say of the departed, but 'not lost':

—“Death, ‘ere thou shalt strike another,
Good and fair, and learned as she,
Time shall throw a dart at thee.”

Dongola, Union Co., Ill. N. C. M.

EVERGREEN HEDGES.

One of our readers in N. E. Missouri desires to plant an evergreen hedge, and wishes to know the best evergreen for that purpose, the proper time of planting, the manner and time of pruning, the cost of plants, &c.

The American Arbor Vitæ is generally used for making evergreen hedges, because it can be purchased at a reasonable rate, and will bear pruning admirably, and makes a fine hedge. We think the Hemlock Spruce makes a finer hedge, but the plants cost more, and are not as certain to live. They keep perfectly green all winter, while the Am. Arbor Vitæ will turn a little brown. The Hemlock Spruce will bear pruning as well as the Arbor Vitæ.

The finest evergreen hedges we ever saw were at the residence of the late Wm. Ried, of Elizabeth City, N. J. It is almost worth a visit there to witness them. They are made of various kinds of evergreens, and are a great ornament to his residence.

The plants should be set in April in ground well prepared for them. A border of at least six feet in width should be made, and trench'd to the depth of two feet. In the centre of this border set the plants in a straight line. The distance apart will depend upon their size. Plants averaging about one foot high should be set about one foot apart, and the greater the height of the plants, the greater the distance of planting will be required.

After planting, the ground should be heavily mulched to keep it moist about the roots. By following our advice not a plant need be lost, and consequently, no re-planting will be required.

In pruning, the desired form of the future hedge must constantly be kept in view. Prune very lightly at first. When the plants become well established and are vigorous, you may go at them with a more unsparing hand. Let the lower branches extend well out, forming a good base for the future hedge. The sides may be made dense and compact to any desired height. The top can be made like the roof of a house in appearance.

The pruning can be done at any time during summer whenever a branch needs shortening. After the form of the hedge is well established, the best time to do the annual pruning is the latter part of May, and if the subsequent growth is vigorous a light cutting may be given it in August.

The cost of plants will depend, of course, upon the size. Plants can be set from one foot to three feet in height, and will cost from eight to twenty-five dollars per hundred. They can be obtained at most of the first-class nurseries.

R. L. Pell's Orchard Treatment.

Many persons finding their orchards unproductive know not how to restore them to fruitfulness. For the benefit of such, we publish the letter of R. L. Pell, the renowned orchardist, to Chas. Downing, Esq. He says:

For several years past, I have been experimenting on the apple, having an orchard of 2000 bearing Newtown Pippin trees. I found it very unprofitable to wait for what is termed the bearing year; and it has been my aim to assist nature, so as to enable the trees to bear every year. I have noticed that from the excessive productiveness of this tree, it requires the intermediate year to recover itself—to extract from the earth and the atmosphere the materials to enable it to produce again. This it is not able to do unassisted by art, while it is loaded with fruit—and the intervening year is lost. If however the tree is supplied with proper food, it will bear every year: at least such is the result of my experiments. Three years ago in April I scraped all the rough bark from the stems of several thousand trees in my orchards, and washed all the trunks and limbs within reach with soft soap; trimmed out all the branches that crossed each other in June, and painted the wounded part with white lead, to exclude moisture and prevent decay. I then, in the latter part of the same month, slit the bark, by running a sharp pointed knife from the ground to the first set of limbs, which prevents the tree from becoming bark bound, and gives the young wood an opportunity of expanding. In July, I placed one peck of oyster shell lime under each tree, and left it piled about the trunk till November, during which time the drouth was excessive. In November, the lime was dug in thoroughly. The following year, I collected from these trees 1,700 barrels of fruit, part of which has sold in New York for four and others in London for nine dollars per barrel. The cider made from them, delivered at the mill two days after its manufacture, I sold for three dollars and three quarters per barrel of 32 gallons, exclusive of the barrels. In October, I manured these trees with stable manure in which the ammonia had been fixed, and covered this immediately with earth. The succeeding autumn, they were literally bending to the ground with the finest fruit I ever saw, while the other trees in my orchard, not so treated, are quite barren, the last season having been their bearing time. I am now placing around each tree one peck of charcoal dust, and propose in the spring to cover it from the compost heap.

[REMARKS.—From this account, our readers will see that the famous Pippins of Mr. Pell, which have a world-wide fame, and the large profits which they bring him, are not produced without care and labor. Those orchardists who succeed best, are those who use most care and judgment in treating their orchards. To be successful in any business, it must be studied—understood. Mr. Pell understands the wants of his bearing trees, and supplies those wants. He knows the treatment they should receive, and he gives that treatment. He excels in his profession—because he studies it and comprehends its principles, as the lawyer and the physician excel in their profession for the same reasons.—ED.]

THE DEVEREAUX GRAPE.

{ DEPARTMENT OF AGRICULTURE,
Washington, D.C., Jan. 14th, 1864.

In the January number of the *Valley Farmer* I observe that Mr. Muir considers the Devereaux of the Garden here, and the Lincoln of others as synonyma. Our Devereaux is accurately described by Mr. Wm. N. White, of Athens, Georgia, in the *Horticulturist*, of 1857, page 458, as follows:

"Devereaux.—The only specimens we have seen were from Peters, Harden & Co. of Atlanta, from which, and from three small vines set out this season, our description is derived, aided by notes from Dr. Baldwin, of Montgomery, Ala. It was found in the woods, over forty years since, by S. M. Devereaux, and first cultivated by himself and his neighbors, near Sparta in this State.

"As Devereaux kept the stage house, passengers soon disseminated it, being struck with the wonderful productiveness of the vine. It seems quite distinct in foliage. Younger leaves, sub-three-lobed; older ones distinctly lobed. The young leaves and shoots are light green (not brownish as in the Warren). Leaves, moderately downy, distinctly arachnoid, hoary instead of fuscous. Bunches, quite long (those sent over nine inches), very much shouldered, compact. Berries, small. Skin, thin, black, covered with blue bloom. Flesh, free from pulp, and abounding in juice, of a color as darkly red as that of the pokeberry; of a brisk and excellent flavor. Quality, 'very good'. A prodigious bearer; hence, like the Warren, considerably liable to rot. (This is not the Devereaux of *Gardening for the South*, which is the true Lenoir). Ripens about the middle of August. The color of the juice is deeper than that of any other grape we know."

I would remark that the vine with us receives no protection; the fruit has shown no symptoms of rot, ripens first week in September, and the bunches average twelve inches in length, heavily shouldered.

In the *Horticulturist* for 1859, page 487, Mr. White again alludes to the Devereaux thus:—“Since my last note, Mr. Peters, of Atlanta, has obtained cuttings from the original vine received as Devereaux from the woods, and on fruiting it turns out to be identical with Lenoir, while the vines from Montgomery prove to be identical with the Ohio, in leaf and fruit. Mr. Peters and myself are satisfied that there is no distinct Devereaux grape.”

W.M. SAUNDERS.

ROT IN GRAPES.

From a private letter from a friend in Illinois, we make a few extracts bearing upon this subject. He says: The high bluffs on the Ohio and Mississippi, and other rivers, and the south and east shores of our great lakes, seem to be the locations for grapes. Prof. Kirtland, of Cleveland, Ohio, attributes the freedom from rot on those lake shores to the *absence of dew*.

An intelligent fruit grower at St. Joseph, Michigan, informs us that the Catawba, Isabella, Concord, and other sorts which have been fruited there, show no signs of rot whatever.—He says they are free from rot on any soil *near* the lake shore, whether sandy or heavy clay, without trenching or under-draining.

The peach also which has rotted so badly here, seems to be free from rot at St. Joseph, and I am inclined to think that the peach rot is due to the same cause.

If any of our readers can throw any light on this subject, we shall be glad to have it. The question is a simple one. Is *dew* the cause of the grape rot? Is it the cause of the rot in peaches?

GROWING CUCUMBERS.—Take a large barrel, or hogshead; saw it in two in the middle, and bury each half in the ground even with the top. Then take a small keg and bore a small hole in the bottom; place the keg in the centre of the barrel, the top even with the ground, and fill in the barrel around the keg with rich earth, suitable for the growth of cucumbers. Plant your seed midway between the edges of the barrel and the keg, and make a kind of arbor a foot or two high for the vines to run on. When the ground becomes dry, pour water in the keg in the evening—it will pass out at the bottom of the keg into the barrel and rise up to the roots of the vines, and keep them moist and green. Cucumbers cultivated this way will grow to a great size, as they are made independent both of drouth and wet weather. In wet weather the barrel can be covered, and in dry the ground can be kept moist by pouring water in the keg.

Planting Arbor Vitæs in a Drouth.

We have received a private note from Prof. Swallow, our late State Geologist, giving us his treatment of some Arbor Vitæs he obtained from us last spring, which he planted in a severe and protracted drouth, and yet did not lose one. If all who buy trees and plants would treat them as carefully, less blame would be attached to those who sell them. As generally planted in sod, and a very narrow and shallow border made, and no after care given, every plant would have died, and the fault would have been laid to the plants. We understand that Prof. Swallow is about starting a nursery, and as he is a thorough-going and reliable man, his success will be certain. Here is the note:

FRIEND COLMAN: I have long designed to write you about the roses, arbor vitæs, &c. which I purchased of you last spring. All have done remarkably well, considering the fact that we have had no rain to wet the ground to the roots of those plants since they were put out in May last. I have nothing of importance to say about the roses; but my treatment of the arbor vitæs may be useful. When the arbor vitæs reached me, I placed them in a moist cellar, where they remained two weeks before I had time to put them out, as designed, for a hedge. I then dug a trench in sod ground or meadow, 18 inches deep and 15 inches wide. I filled this trench with a very sandy soil from the alluvial creek bottom, and set the plants six inches apart, and gave them a good watering—the weather being dry and sunny. I then covered the ground around the plants to the distance of ten inches on each side, three inches deep with saw-dust. A row of planks 14 inches wide was then placed over them, supported on stakes even with the tops of the plants or about 12 inches above the saw-dust. At night the planks were removed, and re-placed when the sun was hot, for about three weeks, when they were taken away. About five weeks after the planting, they were watered again, and this was all the care they received; and now every single plant is green and healthy—none dead.

Yours truly, G. C. SWALLOW.

PEACH WORM.—Of all remedies recommended to prevent the ravages of the peach worm, we have tried none more successfully than the application of from one to eight quarts of leached or unleached ashes around the base of the tree. Before applying the ashes destroy all the worms you can, by picking them out with a large needle or penknife. Their presence is known by the gum that exudes from the tree where they are at work.

Training Grape Vines to Stakes.

ED. VALLEY FARMER: In answer to J. Barr, I would say, that my plan will be, to cut my stakes about seven feet long, and set them one foot apart, by first making a hole with a crow-bar, and then driving the stake in with a mallet—vines from six to eight feet apart in the rows, according to variety. I think the renewal, the best and simplest system of training. If your vines are six feet apart, you will have six stakes to each vine, three on each side. Have your arms within a few inches of the ground, and grow three canes from each arm, tying one to each stake. Allow only every other one to bear fruit, growing canes for next year's fruiting upon one-half of the canes, and fruit upon the other half. The process is simple, and I think as good as any. Stakes, no doubt, are the cheapest, where you are starting a new place and clearing land; but in course of time I think we shall have to trellis. Grow the golden willow for ties—nothing so good or so cheap—they will grow almost anywhere. It is by no means necessary that they should be planted in a wet place. I have seen cuttings make a growth of six and seven feet on high sandstone soil.

Respectfully, E. A. RIEHL.

HOW TO GROW STRAWBERRIES.

ED. VALLEY FARMER: Please answer the following queries in the *Valley Farmer*, and much oblige an Egyptian.

1. Is mulching, or good cultivation, best for strawberries?

2. Are they best in hills, or run at random?

3. Is very rich ground the best?

[**ANSWER.**—1. Where mulching material can be procured at reasonable rates, it is of almost inestimable value in strawberry culture. But it by no means does away with good cultivation. Mulching would be of but little value, unless the ground was deeply plowed, and well prepared for the plants. Good cultivation must be given after mulching. That is, the weeds must be pulled out by hand as fast as they appear. With the best of mulching there will be more or less weeds to contend with.

We suppose you mean, by your inquiry, whether it is better to set out plants in rows, say three or four feet apart, and then keep down the weeds by a horse and cultivator, or to apply a mulching between the rows. Our plan the first year is, to plant in rows three or four feet apart, and then keep down the weeds, and work the soil well with the cultivator. In the winter, cover the rows with straw, and early in spring draw the straw between the

rows to keep the berries clean, and help to smother the weeds.

2. This will depend somewhat upon the variety. Some kinds are more productive by being allowed to run, and others by being kept in hills. We have found the Wilson very productive, treated both ways. It is said the Triomphe de Gand is most productive by being kept in hills. Where labor is cheap, and mulching material abundant, hill cultivation may be best. It is a great deal of labor to set plants a foot apart, mulch them, keep the runners cut off, and pull out the weeds by hand. We think we can raise strawberries by a cheaper process: but we may be mistaken. In the hill system, they must have the nicest care. They can be more neglected in rows, if the labor cannot be secured at the proper time.

3. This will depend upon varieties. We have never found our soil too rich for the best market kinds. The Albany particularly succeeds best in a rich, rather moist soil.]

[Written for the Valley Farmer.]

COLD WEATHER AND FRUIT.

BY CAREW SANDERS.

The unprecedented and long continued cold spell of weather we experienced here, in common with the whole West and South, has, we fear, done immense damage to the fruit trees and fruit crops. From a limited and partial examination made of fruit trees, &c., on moderately high land, near the Mississippi River, I derive the following conclusions:

The peach buds are undoubtedly all killed, and the crop of this season utterly destroyed. The trees themselves being more or less injured, so much so, probably, as to lay the foundation for speedy decay in the younger trees, and trees and wood of a late and succulent growth.

Pear trees appear to be injured; the last season's wood, being discolored, in all shades, from light brown to pretty black. It is recommended to cut well back to within a few inches of last year's wood, in the hope of escaping the damage to some extent.

It is reported by a neighbor, that the Early May, May Duke and other Morello and Duke Cherries, are apparently uninjured, though the worst is feared for the Hearts and Biggareaus. The apples themselves have not escaped unharmed. The flower buds are certainly injured; but whether killed, or not, it is perhaps premature to say. Buds that I examined were black through all but the immediate centre—in the vital part—which may not be injured. Blackberry canes are killed, and the crop of course destroyed. Altogether, we fear we shall have reason long to remember the cold snap of New Year's day, 1864.

Injury of the Freeze of Jan. 1, 1864.

ED. VALLEY FARMER: A few facts communicated to me to-day by Elijah Frost, of Monticello, in reference to the state he finds his pear trees to be in, may be of interest.

Of standard trees, 4 and 5 years set, the following are uninjured: Doyenne d' Ete, Seckel, Beurre Giffard, White Doyenne, Lawrence and Easter Beurre.

The following are somewhat injured: Bloodgood, Franc Real, Flemish Beauty, Duchesse d' Angouleme and Fondante d' Automne.

The following are badly injured: Bartlett, Charmontelle (worst of all), Winter Nelis, Napoleon, Louise Bonne.

Of dwarfs, only Osband's Summer seems un-hurt.

Of a large lot brought from the East and trenched last fall, the least injured were, Bloodgood, Flemish Beauty, Lawrence and Fondante d' Automne; next Sheldon; and worst injured, Bartlett and Winter Nelis. W. C. F.

Alton, Jan. 12, 1864.

[REMARKS.—Mr. Flagg has our thanks for this communication. We hope his example will be followed by others. We are anxious to obtain all the information we can in regard to the damage done by the severe cold of Jan. 1st. It will be found, we fear, that many varieties of apples and pears have been killed outright. Many peach trees, if not all of them, have been killed. Mr. Quinette informs us that his peach orchard is ruined, and others have informed us that their orchard trees were killed. Peach trees standing in the nursery are killed. In regard to apples and pears we are solicitous to learn which varieties have proved most tender and which most hardy. Our readers will confer a special favor by furnishing us all the facts they can obtain. At St. Louis the thermometer fell to 20° below zero.]

**The Cold Term in Southern Illinois.**

ED. VALLEY FARMER: The recent cold storm visited this lowest section of Lower Egypt with a severity astonishing to those of us who imagined we were living in a semi-southern climate. Wednesday (Dec. 30th) was quite warm. During the latter part of the succeeding night, it began to rain. On Friday morning, at daylight, the mercury stood at 30°, and the rain froze as it fell, covering everything with a coating of ice. The rain soon turned to snow, which continued to fall all day, the wind blowing considerably, and the temperature growing colder and colder. At bed-time, the mercury was approaching zero, and the next morning, at sunrise, it stood fourteen degrees below. During the day it rose to 4° below. The next morning (Jan. 2d) it stood at 5° below. The weather continued cold until the 11th: the thermometer marking 1° below zero on the 5th, 4° below on the 8th, and 3½ below on the 9th, at sunrise.

The peach buds are all killed, so far as I can

discover, and I believe the tender branches of the trees are also killed. I am afraid pears are also killed.

A. M. BROWN.

[REMARKS.—We are pleased to get so full particulars from Villa Ridge. This is from the very southernmost limit of the fruit regions of southern Illinois—many miles below Makanda, South Pass, and other celebrated fruit growing points. We may calculate, then, that the peach crop for another year from lower Egypt is a total failure. And if the peach trees are not killed, or seriously injured, we shall be happily disappointed.

Villa Ridge is only a few miles north of Cairo. The atmosphere is influenced in this locality very much by the confluence of two such rivers as the Mississippi and Ohio. It is only 12 miles from Cairo and is the first high land north of that city. For raising early fruits, it is the best point in Illinois, and in some future day will be celebrated in this respect. Vegetation starts very early here and the soil is excellent.

The Cemetery for Cairo is located here, and it will not be long before the business men of that place will have their residences at Villa Ridge, on account of its healthfulness, and to avoid the mosquitoes and the miasma of the low lands in the vicinity of Cairo. To those wishing for fruit lands in Southern Illinois, we especially commend the vicinity of Villa Ridge. Our correspondent, A. M. Brown, Esq., we presume, would be pleased to give fruit growers any information they might desire.

John A. Pettingill, of Bunker Hill, Ill. writes us that "Peach trees are ruined. Am cutting down and heading back all my peach trees."

D. W. Morse, of Jefferson Co. Mo., writes us "I fear our peach trees are all killed down to the snow line."

Geo. Husmann, of Herman, Mo., in a private letter to Dr. Morse, says: "Prospects look dubious here. Peach trees killed down to the snow line. All buds on the Catawba dead, and Norton's Virginia and Concord much injured. I am afraid we must stop agitating the subject of a Great Horticultural Exhibition next fall."

ED. VALLEY FARMER: The late cold weather has been too severe for the peaches in this never-failing peach neighborhood. The buds exhibit, on examination, the fatal black speck in the center. I had hoped they were spared, as the buds were less swollen than usual at this season of the year, having been kept back by the unusual cool season. I shall now feel thankful if the trees themselves are not killed.

GEO. B. GREEN.

Grabville, Franklin Co. Mo. Jan. 16, 1864.

Asparagus—Varieties of.

N. J. COLMAN—DEAR SIR: I wish to plant an asparagus bed, and desire to know the best variety to raise. I want of course the largest and most tender kind. That which I frequently see, is small, tough, stringy. I don't want such a kind on my premises. Will you also please inform me how you prepare the seed for planting and how you set out a bed.

COOPER COUNTY.

REPLY.—We have heard there were several varieties of Asparagus—but have never seen but one kind, and believe there is but one kind. The difference we see in the shoots, is owing entirely to the cultivation. If the soil is very rich and the bed well prepared, and receives an annual heavy top-dressing, and the weeds and grass kept out, you will have what some may call "Giant" Asparagus or the "Large Purple Top," or any other name you may wish to call it. If the plants are set in poor soil, or in a poorly prepared bed, and the bed is neglected, and receives no top-dressing, weeding, or care, then you have the small, stringy, tough variety—but it is the same as the Giant or Large Purple—the difference arising wholly from the care bestowed in cultivation. To raise plants from the seed, prepare the ground with much care—making it of fine tilth. Soak the seed in warm water for 24 hours. Drill it thinly in rows about 12 inches apart as early in the Spring as practicable. Keep the young plants clear of weeds, and when they have stood one or two years, they are ready to transplant in the permanent bed. This should be well prepared, and a large amount of well rotted manure incorporated with the soil. The beds should be made four feet wide—leaving an alley of two feet between the beds through which to pass and cut the shoots. The plants should be set in rows one foot apart, and the plants one foot apart in the rows. They should be set so that the crown of the plant is four inches beneath the surface of the ground. To have early shoots, the bed should be made in a warm situation, and wet ground should be avoided, though a moderately moist soil is desirable. For more complete directions for planting Asparagus we refer to former numbers of the **VALLEY FARMER**.

PRUNING ORCHARDS.—It is a very good rule, and the nearer it is followed the better, that no shoots should be allowed to remain longer than one year on a tree, that will require removal at any future time. By observing the form which a young tree should take, and rubbing or cutting off improper or unnecessary shoots in time, any severe pruning at a subsequent period may be entirely avoided. Hence, the remark has much truth in it, that pruning saws and axes should never enter an orchard—which is strictly correct in all cases, provided the needless shoots have been lopped in time, when the work may be done with the pocket-knife only. A very common error is to allow the growth of too many branches, the result of which is, they become overcrowded, a part die, the leaves and new growth are small and imperfect, and, as a necessary consequence, the fruit is half grown and stunted. The head should therefore be left open, the branches few, and so evenly distributed through space

that none shall be crowded, and all subjected to the action of air and sunshine, and all continue thrifty and vigorous. A moderate share of care and attention to these particulars might be made to give a very different report of our orchards from that now presented by the great mass of apples sold in market. Larger prices, larger crops, and better satisfied purchasers would be the result; and most strikingly so, provided good cultivation were given in connection with judicious pruning.

[Written for the Valley Farmer.]

Monthly Hints for Garden and Orchard.

BY CAREW SANDERS.

In continuation of our subject of last month, in reference to farmers' gardens; I might suggest that where the farmer adopts the plan of horse labor as much as possible, a portion of a suitable field convenient to the house, and adapted to the purpose, may be used as a garden, at least for all the transient crops: though, of course, the perennial crops, like asparagus, rhubarb, strawberries, &c., must have some permanent place; yet that does not invalidate the first proposition of using even a changeable location for the other crops. Indeed, I question if any better, or richer, or more suitable land could be found for most garden stuff, than part of an old pasture or meadow field, which had been broken up the year previous, the sod well rotted, and the larvae of insects destroyed, by a summer crop or fallow. The part thus selected for a garden, might profitably receive a good coat of manure, and an extra deep plowing and harrowing, or two, so as to comminute the particles of soil, and commingle the manure well with it. Now if this were cropped for a year or two with garden vegetables, and then turned out into the field again, I venture to say it would be seen in the increased product of grass, or grain, or other field crops for several subsequent seasons.

And I think that would not be the only benefit that would accrue from this plan, but a saving of labor in not requiring so much weeding and cleaning along the rows of the respective crops; a thing that has to be done in all garden crops by the hoe and hand, no matter how thoroughly and well the horse hoe and plow may have done their work. I see no reason why the garden crops may not be brought into some rotation with the other crops, and with decided advantage to both crops and soil.

In cottage gardens, and all small gardens, where spade husbandry alone is adopted, I would recommend a fixed place to be chosen for that purpose, and by all means erect a neat and strong fence around it, high and close on the North and West sides, while the South and East may be lower and more open. I prefer an evergreen hedge, a high close board fence, or brick wall for the former, while a medium height picket fence or hedge will do for the latter. Either in addition to the fence, or without it, a good screen may be had by planting a narrow belt of evergreens and deciduous trees; and a hedge of Norway Spruce when once grown up would form as effective a screen as the best wall, against cold strong winds.

With a well-fenced garden, divided into quarters, and a narrow border of six or eight feet all around, we have just the place for a host of small beds of the earliest crops, on the South borders; and for the sweet herbs, and various other crops, that delight in a cooler, moister, and somewhat more shaded situation, on the North and West borders. The centre beds to be filled with the coarser and main crops.

ED. VALLEY FARMER: Peach trees are all killed, little and big, on low and high land here (New Bremen, St. Genevieve Co., Mo.), so we can't expect any peaches this year. J.W.

How to Graft Grape Vines.

The Isabella and Catawba grapes do so poorly in Missouri that many inquiries are made of us as to the best method of converting them into healthier kinds. It is but a few years since the new varieties have been disseminated, and consequently nearly all our vineyards contain only the Catawba and Isabella. When the Catawba does succeed, it is an excellent grape, and makes an excellent wine. But in Missouri it never is entirely healthy, and in not more than one year out of three or four is there a full, and we think we might safely say more than half a crop. If some other varieties can be grafted into the roots of these, that will be uniformly productive and healthy, it certainly will be more profitable. Below we give the method of Mr. J. B. Garber, of Columbia, Pennsylvania, of grafting the Grape:

"I prefer to graft the vine before the sap flows, as early in the Spring as the frost is out and the ground is dry enough to remove from the roots, or to delay it until the vines are in full leaf and flower. Either plan is equally sure. From the last of February to the end of March, as the seasons are early or late, or from the last of May to the last of June. I have, however, grafted when the sap was flowing freely, and had the grafts grow. However, as the most certain, I prefer the earlier season—say two or three weeks before the sap starts—for this reason, that the grafts have a longer season to grow, and also from the difficulty of keeping the grafts in good condition so late; either they will push or they will become too dry.

"As to the 'great success of a certain man in Pennsylvania, who set Delaware grafts in Isabella and Catawba layers by splitting them with a chisel and inserting the grafts in wedge form,' I have no certain knowledge, but presume him to be the same person who, a few years since, offered 'cartloads of Delaware wood to the public from original vines, simply for the cost of cutting, &c.' I would not have sufficient confidence even to try that plan; and as to keeping the earth from the grafts, it would, I believe, be a pretty effectual plan to prevent their growth.

"I proceed as follows: Early in March, or as soon as the ground is free from frost and pretty dry—at least two weeks before the sap flows—I cut off the stocks three or four inches below the surface, or, if the roots are from one-fourth to half an inch in diameter, cut them off, and graft three, four, or half a dozen roots on one shoot. I simply split the stock or roots, as in grafting any other tree, stick in the grafts, cut in the form of a wedge, tie the stock with strong burs or other material to keep the stock from opening, fill in the earth level with the top eye on graft, stick a stock alongside the graft, then mulch over the whole with refuse hay, potato-vines, or anything on hand. I use no wax, believing it to do more harm than good.

"I frequently keep the cuttings in slightly damp earth or sand till May, and even late in June, and then perform the operation as before. They grow equally as well, but for the reason stated above, the early season is preferable. One graft set 25th June made 20 feet of ripe wood by fall!

"Two years since—Spring of 1862—Mr. Rogers of Salem, Mass., sent me cuttings of 16 of his best varieties, to be tested in this locality, Lancaster County, Pa. I grafted all of them on seedling stocks—15 of them grew, and 13 of them bore fruit in 1863. One failure was owing to the root dying; four grafts on one stool made over one hundred feet of wood the first season, and many single grafts made from ten to fifty feet of wood. This season some of them bore from two to three dozen bunches of fruit on one graft, or on one stool.

"During the Spring and Summer of 1862, I grafted 28 varieties; all but two are now fine large plants;

most of them bore fruit this Summer. Last Spring, 1863, I grafted about a dozen new varieties; all are now fine plants, and nearly all will show fruit next year. Sometimes I take a branch, cut it off at a smooth place, stick in a graft or two, open a trench and lay the whole or a part in, and cover with soil, merely marking where the graft is buried, mulch, &c. To say, as some have asserted, that the grafts will not become firmly united to the stock, but are simply kept moist by the stock until they can throw out roots of their own, or that they never make durable plants, is anything but the truth, as I can at any time show to the satisfaction of any person who chooses to verify the fact. It is really astonishing to me that this 'grafting the grape' is so little understood by the 'knowing ones.' Time is money in more senses than one; and especially so with the many new grapes that are constantly brought before the public. To get the little forced plants—as a correspondent expressed himself to me a few days since—"it takes a life-time to get the fruits." These spindly little forced plants may do well enough for young people who 'have time to wait,' but give me a good graft on a strong root, and in eighteen months I can taste the fruit."

What is the Best Position for Grape Trellis in Missouri.

As the season for planting grapes will soon be upon us again, it may not be out of place to call attention to some circumstances connected with this subject. It is frequently asked by persons about to plant out grape vines; which is the best course to run the rows? and the popular answer is, run them due East and West. This subject has engaged our attention for several years, and as this is one of vast importance to the vineyardist, we say that the best course for trellis is at an angle of 15° North of West, or 105° from the South point.

Let us consider the effects of this arrangement:

First.—The maximum heat of the earth for the 24 hours is at 2.15 P. M., at which time the sun shines from a point in his course $33^{\circ} 45'$ West of South, and will form an angle, with the trellis, let us suggest, of $71^{\circ} 15'$, and will thus give its fullest light and greatest heat both as to quantity and duration, to the full face of the line of trellis.

Second.—This gives the unbroken rays of the sun to the face of the trellis, and that for the longest period, just when light and heat are most required by the vine, at the time of its ripening its fruit, or from the 15th of July to the 15th of September. On the 15th of July the sun sets at 7.14 P. M., or at an angle of $123^{\circ} 45'$ West. On the 15th of September at 6.12 P. M., or at an angle of about $92^{\circ} 45'$ West, giving a mean angle, for the two most important months to the ripening of the grape, of $108^{\circ} 16'$, while the angle of the trellis is 105° , so that during the mean of the season of the fruit ripening, the setting rays of the sun will be $3^{\circ} 16'$ north of the line of trellis, and will give the shade of the trellis at that period of the day when his rays are most feeble.

Third.—On the 15th of July the sun rises at 4.46 A. M., or at an angle of $109^{\circ} 41'$ East, and on the 15th of September at 5.40 A. M., or at an angle of $95^{\circ} 37'$, giving a mean angle of $102^{\circ} 39'$ East, while the angle of the trellis East of South will be 75° .

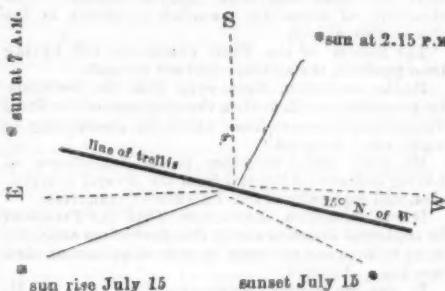
The East end of the trellis will thus produce shade at 7 A. M., from two and a quarter to one and a quarter hours of sunshine on the North side of the trellis, or a mean of one and three quarter hours, and the shade will be in full light and considerable heat, and the full front will have a mean of nearly fourteen hours exposure to the full action of the sun at the best portion of the 24 hours.

The difference in the spring will be incon siderable. The danger to the vine from frost from its first pushing till the usual time of entire exemption from frost, say between the 10th of April to the 20th of May or the 1st of June, will be mitigated in but a small de-

gree by any shade the trellis will throw in the morning.

The sun rises on the 15th of April at an angle of $98^{\circ} 26'$, and to get any benefit of shade against hoar frost, the trellis should be set at that angle, and the sun at 2.15 P. M. will then shine upon the front of the trellis at the angle of 138° with the line of trellis and within 42° of easting shade with it and that at the part of the day when the effect of the combined light and heat is fullest, and most necessary to the development of the fruit.

From these reasons, which would meet the mental conceptions better by having the angle lines drawn to the eye, our first choice for the line of vineyard



or other trellis is at an angle of 15° North of West. We have not space to weigh why 25° would not be better than 15° , but we would prefer the former to due East and West, while a greater angle North creates objections of very grave character, which may be noticed at a future time in connection with "Protection to Vineyards."

In regard to height of trellis, distance between rows, inclination of surface—there are many important details which will be much aided by scientific inquiry and upon which a set of valuable scientific tables may be constructed at some other time.

WILLIAM MUIR.

[Reported for the Valley Farmer.]

The Mo. State Horticultural Society.

The Fifth annual session convened at St. Louis on Tuesday the twelfth day of January, and continued in session four full days. It was the largest and most interesting meeting yet held. The whole proceedings were characterized by harmony and the most cordial good feeling. All worked and acted like brethren engaged in a noble cause, and anxious only that truth should be disseminated. There were many apples on the table, but not a single apple of discord was introduced. We shall publish an abstract of the proceedings, and would gladly publish the proceedings entire; but if our entire Horticultural Department were devoted to their publication for the year, it would not contain them. The proceedings on account of the great number of addresses and essays are much lengthier than usual.

FIRST DAY.

The session was opened by an impressive prayer by Rev. Dr. Post. President Mudd then read his annual address which was practical and appropriate, and ordered to be published with the proceedings. On motion it was referred to a committee of three, consisting of Morse, Bryant and Husmann, with instructions to report specifically on the subjects embraced in the address, where action is recommended to be taken by the Society.

Colman, Chairman of Business Committee, said before reporting the order of business and the topics to be discussed, he desired to obtain the sense of the

meeting. Heretofore we had been at each session travelling over the ground which we had passed over the preceding sessions. Our discussions had all assumed the same forms, and not much new matter could be added at this session if we proceeded in the same way. He thought our action should be confined to the selection of lists of a few of the choicest varieties of the various fruits for market and family culture, and with the approbation of the meeting he would report that our discussions be confined to the selection of lists for general cultivation for market and family use. After some discussion the plan was adopted.

THE APPLE.

SUMMER VARIETIES.—On motion, the Society proceeded to the selection of three summer varieties for market. Colman, at the request of Dr. Edwards, to name the three best for market, named Early Harvest, Red June and Red Astrachan.—Edwards doubted if the Red Astrachan in this latitude should be placed on the list. Husmann had been familiar with it for twelve years and never knew the crops to fail or the fruit to be inferior and had found it to be very profitable.

Colman said, Mr. Deterding, who lives on the American Bottom three and a half miles from St. Louis purchased a farm eight or ten years ago with a young orchard just coming into bearing. Among the trees were about two hundred Red Astrachan. Neither he nor his neighbors knew the name of the fruit, but it was found so profitable a variety for market, that it obtained great celebrity and was called Deterding's Early. He had visited the orchard and was satisfied it was the Red Astrachan. Had sent specimens to Dr. Warner, who thought them the Red Astrachan. This variety has made Mr. Deterding rich, as it has brought very high prices and been very productive. Quinette had cultivated it fifteen years and found it profitable. Husmann said there was an objection to the Red June, that it bore only every other year and then so full that the fruit is small; but if three were to be adopted for market, he could not name a better.

The vote was then taken, and the Early Harvest, Red June and Red Astrachan, were unanimously put upon the list as the three best for market culture.

For family use, a list of five was adopted, consisting of the Early Harvest, Sweet June, Early Strawberry, Summer Queen and American Summer Pearmain.

AUTUMN VARIETIES.—The Society then proceeded to select a list of five autumn varieties for market. Considerable discussion then ensued upon which should be considered autumn varieties—the Society at a former session having placed the Yellow Belleflower in the autumn list. Finally, a motion was adopted denominating all apples ripening after the fall months, including the Yellow Belleflower, winter varieties.

AFTERNOON SESSION,

Spalding moved to re-consider the vote classing the Yellow Belleflower among the winter apples. Quite a lengthy discussion ensued, but as no new facts were elicited, we omit it.

The motion failed.

The selection of a list of five varieties for market was then proceeded with. Maiden's Blush was proposed. Husmann thought it difficult to keep till September. It was a summer, not a fall apple.

Colman's experience differed. It ripened in September. Fruit was large, very showy, productive and profitable. Maiden's Blush by vote was put upon the list. Hubbardston's Nonesuch was proposed, and adopted. Fall Queen proposed. Husmann objected as it keeps into winter months. Lost, Gravenstein proposed. Husmann—tree tender. Colman had not found tree tender in this latitude. The apple was large, showy and productive. Lost, Famouse, Rambo and Ramadell's Sweeting were proposed and adopted.

The next business being to select five best sorts for

family use, on motion of Dr. Edwards, the market list was adopted for family use.

On motion the winter list was divided into early winter and late keepers.

Wine proposed. Huggins was anxious its local name, viz. Pennsylvania Red Streak should appear in our proceedings, as most persons would not know it by the name of the books. The variety was highly commended. Colman said tree was an early and abundant bearer, and fruit was excellent for market purposes. Yellow Belleflower proposed. By most of the members considered too unproductive for market, though an excellent variety for family use. Rhode Island Greening—Dr. Long says it succeeds well with him at Alton. Husmann says it is a good apple, but drops its fruit badly. Jordan has found it affected by rot. Huggins finds it a good bearer, but it drops early from tree. Spalding thinks it a good cooking apple. Hull thinks highly of it; should be picked early. Beale, from specimens sent him, is pleased with it. Flagg finds his tree unhealthy. Colman decidedly opposed to its adoption. Fruit of good quality, but instead of being the fine winter apple of the North, it here ripens in the fall. It has too many objections to it to be adopted. It is affected by rot. It drops very badly from the tree and very early in autumn. It is a very poor keeper. The tree is unhealthy. It is totally unworthy of cultivation in Missouri. Adopted. [We shall have something to say at a future time about this strange decision of the Association. We think a more objectionable variety could not have been put on the list for Missouri.]

Fall Queen proposed and adopted. Domine proposed. Long strongly commanded it. Huggins found it did not hang well to the tree, and it was rejected. American Golden Russet and Lady apple proposed and adopted. Rome Beauty adopted and highly commended by several members as bearing early and abundantly, and fruit large and showy. Red Canada—adopted; several members speaking favorably of it. Jonathan, adopted.

The following list for early winter use in the family was adopted. Yellow Belleflower, Peck's Pleasant R. I. Greening, American Golden Russet, Jonathan, Lady Apple.

On motion, the late keeping varieties were then taken up for discussion.

Rawles' Janet. Mr. Flagg said he had sent out circulars throughout Illinois making inquiry as to the best fruits, and from answers received, had found Rawles' Janet the most popular apple in the State. Adopted. Newtown Pippin proposed. Several members said it should be confined to limestone soil. Adopted. Michael Henry Pippin quite highly commended, and thought by Husmann more profitable than the Newtown Pippin. Willow Twig and Wine Sap highly commended, and adopted. Gilpin or Little Romanite highly praised by Huggins and Long, as a profitable market variety. The Ben Davis, Carolina or Baltimore Red highly praised as a superior market variety and adopted. Ladies' Sweeting, adopted. On motion the list was closed.

On motion of Dr. Edwards the Society then proceeded to select a list of four varieties for Cider. The following were adopted: Hughes' Virginia Crab, Gilpin, Newtown Pippin and Harrison. [We think a great error was here committed in recommending Newtown Pippin for cider in preference to the Rawles' Janet. We think Rawles' Janet one of the very best cider apples we have—making cider of very superior quality and of great body; while the Newtown Pippin cider is notoriously very light.]

On motion a committee of three, consisting of Messrs. Hull, Husmann and Spalding, was appointed to recommend a list of apples for trial which are promising well.

[To be Continued.]

[Reported for the Valley Farmer.]
Meramec Horticultural Society.

Eureka, Jan. 7th, 1864.

The sixty-first monthly meeting was held at the School House, but on account of extreme cold adjourned to the house of President Beale.

The reading of the minutes of the former meeting was, on motion, dispensed with.

The reports of the Secretary, Treasurer, Librarian, with Executive Flower and Vegetable Committees, were received, read and adopted.

The report of the Flower Committee showed that the most regular contributor to that department was Miss Mary Harris, and the contributors receiving the highest mark of commendation most frequently were Mrs. Dr. Beale and Miss Miriam Bodley. The chairman of committee awarded premiums to the three ladies named.

The Report of the Fruit Committee not having been received, the awards could not be made.

It was, on motion, RESOLVED, That the Secretary be requested to obtain from the chairman of the Fruit Committee the report from which the awards may be made up. Adopted.

Mr. Allen called attention to the importance of having full annual Reports from the several Committees, and especially of the Executive Committee.

It was, on motion, RESOLVED, That the President be requested to assign a subject to each of ten essayists, so as to have one on some branch of culture at each meeting. Adopted.

It was, on motion, RESOLVED, That Mr. P. M. Brown be requested to present the first Essay of the series on the culture of Tobacco. Adopted.

A question was raised on the point of Tobacco coming strictly within the scope of a Horticultural Society. The Secretary thought that Horticulture did not fully or exclusively engage the soil or time of the members; that they must have other crops to help them along, at least till their fruit crops were procur'd. Many varieties required years, and something must be raised to supply the deficiency; that whatever was grown upon the soil compelled the attention of the grower as good or bad, and to know the article it had to be grown and discussed.

The Election of Office Bearers being in order, T. R. Allen and L. D. Votaw were appointed tellers, and the following gentlemen were elected for the ensuing year:

President, Dr. J. B. H. Beale, Eureka.

Vice Presidents, Wm. Harris, Allenton; L. D. Votaw, Eureka.

Recording Secretary and Treasurer, Wm. Muir, Fox Creek.

Corresponding Secretary and Librarian, T. R. Allen, Allenton.

Executive Committee, Jas. Cornwell, T. R. Allen, P. M. Brown.

Fruit Committee, J. S. Seymour, Wm. Harris, R. S. Elliot.

Flower Committee, Wm. Muir, Ed. Vaughn, Mr. Helfenstein.

Vegetable Committee, Wm. Essex, L. D. Votaw, T. R. Allen.

The Secretary called attention to that portion of the Official Report that urged the necessity of the members keeping up with the times, and to the importance of sustaining with the utmost vigor the "Valley Farmer," which had so long been the exponent of Agriculture in all its Departments, and had been so very courteous to our Society.

The President announced the next meeting to be held at Allenton School House on the first Thursday of February.

W. MUIR, Secretary.

"Shy she was; and I thought her cold—
Thought her proud—and fled over the sea;
Filled I was with envy and spite,
When Ellen Adair was dying for me."

[ALFRED TERRYBON.

CALA. SHERRY AND MADEIRA.

Although wine making in California is as yet in its infancy, the progress which has already been made by our vineyard proprietors toward producing a merchantable article of wine, capable of competing with the European article in the world's markets, is most gratifying. In addition to the ordinary white and red wines, Angelica and Port, the Buena Vista Vinicultural Society, at Souoma is now manufacturing Champagne in large quantities and of fine quality, while the wine-growers of Los Angeles are turning their attention, with success, to the production of Sherry and Madeira wines, equal in flavor, and superior in purity, to the imported wines bearing their names. The process by which these last named wines are produced is extremely simple, and not expensive. Mateo Keller, the proprietor of the Rising Sun and Los Angeles vineyards, has perfected his apparatus for the manufacture of Sherry and Madeira on a large scale, and a description of his establishment, now in full operation, will answer for all. A large apartment in a brick building, is walled and plastered so as to be air tight, and heated to a mean temperature of one hundred degrees Fahrenheit by means of flues connected with furnaces below. Into this chamber the casks containing the common white wine, intended for conversion into Sherry and Madeira, are rolled, and the doors are closed so as to admit of the influx of no cold or damp air, for a period of seventy-five to one hundred days. The heat is kept up continuously and the wine is pumped from cask to cask as often as possible during the whole period. The wine under this process gives off an immense volume of gas, which is highly inflammable, and is extremely dangerous to the workmen, and not only loses in bulk to a considerable extent, but changes totally in character—body, color, flavor, and bouquet, all becoming of a different kind. The Sherry ripens under this treatment first, the Madeira requiring from ninety to one hundred days to fully ripen ready for market. The change is complete when the casks come out of the chamber, but age gives tone and mellowness to the wine, which will continue to improve for years.

MISSOURI AND ILLINOIS HORTICULTURAL IMPORTING ASSOCIATION.—At a meeting of some members of the Missouri State Horticultural Society, held on the 17th of January, at its last session in St. Louis, Dr. E. S. Hull was called to the Chair, and W. C. Flagg appointed Secretary; and it was unanimously Resolved that we form a Horticultural Importing Association.

The following gentlemen were then elected officers for the ensuing year:

President—E. S. Hull, Alton, Illinois.

Treasurer—H. T. Mudd, St. Louis, Mo.

Secretary—W. C. Flagg, Alton, Illinois.

EXECUTIVE BOARD.—E. S. Hull, Alton; C. W. Spaulding, St. Louis; H. T. Mudd, St. Louis; N. J. Colman, St. Louis; W. C. Flagg, Alton.

After some discussion as to the best course of procedure, the following Constitution was adopted:

Article 1.—This Society shall be known as the "Missouri and Illinois Horticultural Importing Association."

Art. 2.—Its object shall be the importation of such Fruit Trees, Ornamental Trees, Plants, Stocks, Bulbs, &c., as may be ordered by its members.

Art. 3.—Any person may become a member by the payment of one dollar, and signing this Constitution.

Art. 4.—The officers shall consist of a President, Treasurer and Secretary, who, in connection with two other members, to be elected by the Society, shall constitute an Executive Board, charged with the direction and control of the affairs of the Society, subject to its instructions; they shall hold their office for one year, and until their successors are chosen.

Art. 5.—The Society shall hold its annual meetings on the Thursday after the second Tuesday in January, and the Society or the Executive Board may be called together at any time by the President.

Art. 6.—This Constitution may be amended at any meeting by a two-thirds vote of the members present. The following gentlemen paid their fee, and became members.

E. S. Hull, Alton, Ill.

C. W. Spaulding, St. Louis, Mo.

N. J. Colman, St. Louis, Mo.

Jonathan Huggins, Woodburn, Ill.

James E. Starr, Elizah, Ill.

L. D. Votaw, Eureka, Mo.

John A. Pettingill, Bunker Hill, Ill.

B. F. Edwards, St. Louis, Mo.

Geo. Husmann, Hermann, Mo.

John Henwood, St. Louis, Mo.

Carew Sanders, Carondelet, Mo.

W. C. Flagg, Alton, Ill.

H. Claggett, St. Louis, Mo.

J. H. Tice, St. Louis, Mo.

J. J. Kelly, Rock Hill, Mo.

H. T. Mudd, St. Louis, Mo.

Some discussion then followed upon the desirability of an early called meeting, at which the orders of the various members could be combined, and it was voted that parties ordering trees shall deposit the amount of probable cost and transportation with the Treasurer. Adjourned. E. S. HULL, Chairman.

W. C. FLAGG, Secretary.

TIME FOR GRAFTING THE APPLE.—The best time is the spring when the buds are beginning to swell, the scions for grafting having been cut a few weeks previously, and kept in a moist cool place, or in a box of damp moss in a cool cellar, so as to be neither shriveled or water soaked. Grafts may be cut and inserted the same day, if the buds have not swollen much. Grafts are sometimes set much later, but starting so late, they do not make so good a growth during the summer.

HOW TO CURE A SMOKY CHIMNEY.—“I have just succeeded,” says Mr. C. Butler-Clough, in the *Mining Journal*, “in curing an obstinate smoky chimney by the aid of a zinc covering outside a common earthenware chimney pot, having two openings in the zinc, one east and the other west.

There are also two partitions or stoppers, north and south, to prevent the draught from escaping by the opposite opening. By the aid of this contrivance an upward current of air is carried outside the flue to its top, on the windward side of the chimney. I have now had the plan in use for some time, and in the face of several most violent storms, not a particle of smoke or soot has come down the flue. In other rooms, the soot was blown on the floor to a large extent.”



Our fair Correspondent has our thanks for these beautiful lines.

EVENING THOUGHTS.

The day that from the darkness merged,
Again is in the shadows lost;
The eye no longer can discern,
The things it loves to look on most.
But thought, which no restraint can stay,
Is wan'dring through the happy past,
Or searching for the hidden way,
That leads into the future vast.

How fit to represent our lives,
The day that now with darkness blends;
Life's light and shade for mas'try strives,
And thus in rayless midnight ends.
Though bright the midday hours of life,
Its morn and eve is filled with gloom;
The restless shadows hover round,
Alike, the cradle and the tomb.

We see them dreadful, dark, and cold,
When those we love are laid from sight,
Yet from that baptism they arise,
Clothed in immortal life and light.
Then, ends our life in rayless night?
No! 'tis the dawn of endless day;
For we shall walk with Him in white,
And God shall wipe our tears away.

COUNTRY GIRL

[Written for the Valley Farmer.]

IN LOVE—AND WHAT CAME OF IT.

How little I thought when I first came to Felton what was in store for me! I had been a student for ten years, studying at the old home-stead, and isolated from the world, not absolutely, but from its experience. I found out when I came to reside in the village, among men (and women too), that there was a great difference between the actual and the theoretical. I came prepared with fully established notions about the various things of life—also on the subject of marriage. My opinion was—and this was coolly and deliberately formed—that marriage should always be based upon esteem. Love I excluded, I considered it ephemeral.

With this philosophy, and philosopher as I was, I came on to Felton. I took up a room, in the second story, opposite a Mr. Semmes, a farmer, pretty well to do, and who had not less

than half a dozen daughters. There was a peculiarity about these girls; they were all of one cast. They so nearly resembled each other, it was more by their age that they were known than otherwise. Their dispositions also were much alike; and they were all fair, with features of the Greek type, "Americanized," as I used to think, though there was more vivacity, especially in that important appendage, the nose, which was slightly depressed towards the tip, then curved out. It was rather an interesting nose—the family nose—faithfully reproduced from the ancestors. The cheek was fair, the forehead slight and somewhat retreating. There was a good chin, rather fine. The form was voluptuous, fluent, active. Of good respectability, and well dressed, friendly and talkative, and affectionate, the Semmes family were quite an object of interest in the village, and in the community at large. Not rich, though well to do, their property was not an inducement in the matrimonial line.

They were my neighbors. I at once discovered there was a little haughtiness in their appearance, and considerable pride. But I need not be troubled by any of them; I had my room to myself, and could exclude myself from all irritation. And so I did. I devoted myself to my studies. But there was the life around me. This, if nothing else, was a new sensation. Human life, in its various forms, came in contact with me. I was but little out in the village; my room held me closely. Thus I lived for months.

One day I met one of the members of the family opposite. She was the youngest, a girl of about twelve or thirteen, not large for her age, rather spry, mobile as she moved over the ground, and in company with a niece of hers of the same age. She was ordinarily dressed, and careless, apparently, of her appearance, though not untidy—rather the creature of family circumstances, for she seemed not to think of these things. I had been acquainted with the family before I came to the village. I had known the older girls, but not this one, the youngest of them all, yet, curiously interesting, bearing the same close resemblance. She was another of this type of flowers, the bud of the whole group. This view interested me. I would always notice when I saw this careless, easy, unaffected little creature. At last I ventured to speak to her. I forgot whether she answered me or not. She showed some timidity, being young and rather small for her age, but would continue to be seen, or rather would not avoid a meeting.

I noticed at last that these meetings increased. She would even call at my boarding place—not my room opposite—in company with her niece; they were never apart. I always was pleased to meet her, as I would be with a sun-beam; so that at last she became, unsuspectingly a sort of pet to me.

Her visits increased, and the places where I called would sometimes find her. As to her visits at my boarding place, (at a relatives, and where I considered it my home,) they became regular; and what was interesting and gratifying, she at last came alone.

This went on for several years. Each evening the well known step was heard, the door opened (no knocking), and the little form quietly came walking in, and straight to her place, generally retired. Her visits had become a matter-of-course. If by chance they were interrupted but for a day, there was an evident vacuity, and her next visit was more sprightly, more interesting, in which case she had always to tell of the wonderful things she had seen. These were interesting little chats. And they always held me longer. The evenings, indeed, had become my longest time of leisure. How curious it is! These little visits were among the pleasantest of my life. They became at last a necessity. When missed, disappointment, unrest followed. It seemed so also, and unmistakably, on her side.

In the meantime, she was growing, but how imperceptibly! She never grew tall, rather under size, with somewhat plump, mobile limbs—a “bewitching little creature,” some would say, though I never thought exactly in that way. I never walked home with her these evening visits, somehow it seemed an understood matter not to do so, on both sides. She was of a timid, though outspoken nature.

At last she attained her sixteenth year. The visits were continued as of old. Was it the excellent lady of the house that attracted her? or was she attached to the old student? now thirty-two, exactly double her age, and which—it was a great undertaking—she once ventured to remark. This was a suggestion. There were, however, few such suggestions. Timidity and habit were probably the cause. Though to others she was not timid—outspoken enough there.

Thus things went on, smoothly and happily. Thoughts of marriage never entered my head, notwithstanding her suggestion above. But her visits were pleasant, and it was not till she was absent a whole week that I knew *how* pleasant, how *necessary*. That was quite an era, and I thought she would never get through with her talk—all addressed to the family, the head female members of it, with a look only now and then cast at me, but sure always that I should get the full benefit, facing me, as was polite.

At last an incident occurred, not a serious, though an important one. It broke the spell that had been forming for years. We were assembled in the parlor, a few of us; and there was a motion made that a little dancing be had. So at it they went, Nelly (that was her name), and a cousin clerk from the east. He was not handsome, but well dressed, and accomplished.

They waltzed, and seemed to enjoy it. I know the clerk did, hugely; and she—she seemed to cling to him with the greatest fondness, with now and then a look at me expressive of pleasure. She was fond of dancing, had expressed herself so, often. And now, in this little exercise, she seemed to be delighted. I felt annoyed; I showed it very, *very* foolishly, by impetuously and unreasonably asking her to dance with me (who never danced). She refused and turned aside; not from any pettishness or dislike that I knew; but she said “No,” and turned away. It was said pleasantly, and in her nat-

ural way, with, I thought, the least possible disturbance. Upon this refusal, I showed positive displeasure. She resented it instantly; like a flash it came over her. And the next moment she was dancing, flirting, more desperately than ever; and it was at her own suggestion, she went to her partner and brought him on the floor. I showed offense; she saw it—cared not; but stopped at last. Silly performance (I thought) all round. I changed my colors. It galled her, or something did. And that evening she flirted as if an evil fate was possessing her. I felt ashamed of her. The clerk was delighted, yet surprised. Her face wore a white look. It was distorted; the eye restless and unnatural. Altogether it was a most disagreeable time, and a strange one.

This continued nearly the evening through. There was no pause; so I picked up my hat, and in a sort of determined huff, mortification and chagrin, went out. I had left the room but a short time when I returned. She was not there; she had left soon after I did.

I was restless, uneasy—never more so before. And it lasted the whole evening. The next morning it was the same; I could not shake it off. I tried various ways. The truth is, I did not know what was the matter. What cared I for Nelly Semmes? The thought of marrying her had never occurred to me, to be entertained. So the day wore on, still restless, unable to read or write, deprived of appetite. Should I prescribe something?

When night came the cause was explained. With an impatience that was unusual, I longed to be reconciled. This longing affected me as the evening approached. And when the time came for her usual visit, never was ought watched with more solicitude than her expectant step; hardly expectant; doubt, all was doubt. No step approached. The time passed by. It was a wretched evening.

My hat was taken; I now proceeded to a neighbor's, where she was in the habit of calling, and where we occasionally met. Would she be there? I must find her. I called: she was there. She was agitated, half pleasurable, and half in uncertainty, so I thought.

I at once spoke to her, and she was but too glad to answer me, putting great stress upon insignificant things. A load was removed from the little bounding heart; and from the large also. From that time there was rest.

Similar occurrences took place as time advanced. In a word, the “unsmooth course” had commenced. I was one of the victims; and so was she. And so the thing went on for years: the happiest and most miserable of my life.—I was “in love” then, and knew it well enough. But marriage was a thing I could not deliberately decide upon. “It would not do.” Yet the thought ever occurred, till the citadel began to tremble; and, as is usual, at last it fell: the “question” was asked. I was refused, point blank. “There never had been any love on her part.” Was this so? “Yes,” I thought at the time; “No,” I said afterward, after mature deliberation. She was frightened; I had been too abrupt in my proposal.

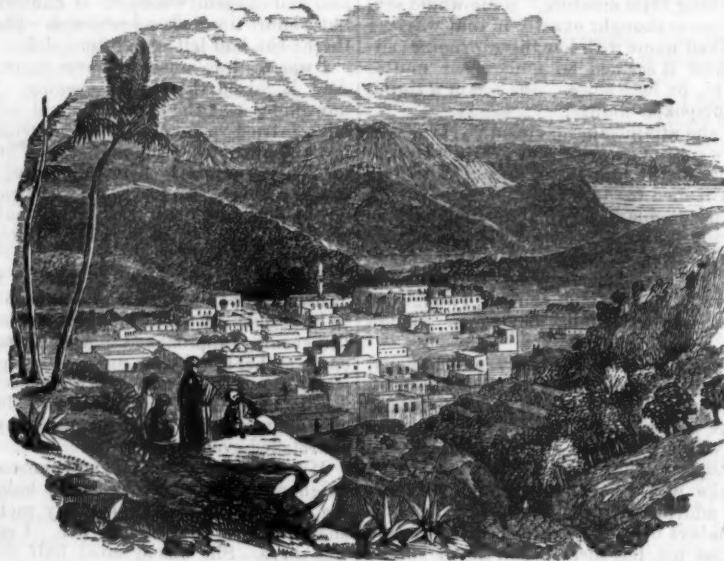
The old state again returned, of hope and despair, felicity and distress. As she grew older, however, she became more steady, more intelligent—in a word, became a woman. The poetry of girlhood had fled: only its memory remained. I became more cool; I might say, rational. I adopted the practice of leaving home for several months during the year. This had an effect. But I was cool, and became less and less inclined to meet the object of so many years attachment. Her visits had long since ceased, or were occasionally and intelligently indulged in.

I have not told how many flirtings she has had, and their occasion. They were of a piece with the waltzing.

At length there were unmistakable marks of the leanings of her mind. The mature woman, the reasonable presided. Now should I marry? (As if a man should marry when in love.) The ardor of a first love had subsided; and I than k

ed Heaven that I had escaped safely. Judgment now took her seat, ardor dethroned. I was again the normal self of other years; I was rational. But she was woman. Still she clung to the former years, for she had no other. This was the most touching of all: she knew only love. She could not now, and henceforth breathe without it: it would be death.

Years passed in this way; she also went from home, and returned, inquiringly. There was still some of the fire left (on my part) slightly fanned; but that was all. It could never be raised to a flame; the fuel was gone. Still she hoped—would flirt to rouse me; then a long cessation. At last, after a few desperate efforts to obtain the desired information, she yielded—to the usual resort in such cases, a hasty marriage. She still loves me; the marriage was but an incident. And now I see the folly of my first conduct, and the wisdom of my last course.



NAZARETH.

Here we have a picture of the city where Jesus lived when a child. It was situated 60 miles directly north of Jerusalem, and was noted in ancient times as a very wicked place, as you will remember, when Philip told Nathaniel about Jesus, that Nathaniel, in surprise, said to him, "Can any good thing come out of Nazareth?" This represents the town, as it appeared a few years ago. You will notice that the houses all have flat roofs—as nearly all the houses are built so in that country—because it is the custom with the people to spend much time sitting on the tops of the houses.

The hill in front of the city, where you see the group of men, is probably the very place where the people led Jesus out to throw him

down, as you will find recorded in the 4th chapter of Luke. It was here, in Nazareth that Jesus learned his trade as a carpenter; it was here, too, that he was subject to his parents, (Luke ii. 50,) and although the Bible does not tell us much about his early life, we may be sure that it was such an one as we all would do well to follow.

STORING POTATOES.—The most successful mode of preserving large quantities of potatoes which we have witnessed, is to bury them in large heaps, and cover them first with straw thick enough to form a coating of one foot when well packed. A covering of earth or turf three inches thick over the straw was found amply sufficient to exclude frost; while the absorbing power of the great mass of straw prevented injury from dampness, and the thin coating of earth admitted a good ventilation.



Editor's Table.

FARMERS, PLEASE WRITE.—Our readers can be of great service to one another if they write. We want them to give their experiences—their mistakes, as well as their successes. It is only a false diffidence that prevents them. They lack confidence. They should have a higher opinion of their ability to write. It is the easiest thing in the world to do. Every one of our readers could sit down and tell a neighbor how he has managed every crop. He could talk clearly and methodically upon every subject he understands. All that we want is that he should write just as he would talk, using the simplest, plainest words. Finish each branch of your subject as you go along, so as to be clear and methodical. A little practice would make the most of our readers' fair writers. The "Valley Farmer" is YOUR paper. For fifteen years you have supported and sustained it, and it belongs to YOU, root and branch. Consider it your own, and help to advance its interest by conveying valuable information to one another through its pages.

DEVEREAUX GRAPE.—We have received a private letter from Mr. Wm. Saunders, who has charge of the Goverment Garden at Washington City, which we take the liberty of publishing, as it may be of some interest to our readers. We hope Mr. S. will excuse us for the liberty we have taken.

WASHINGTON, D. C., Jan. 14th, 1864.

N. J. COLMAN, Esq.—Dear Sir: Seeing a notice of the Devereaux of this Garden in your "Farmer," I have sent you White's description of it. Things have been so loosely kept heretofore in this Garden, that there is no record to show where the grapes were obtained. I think it probable that the Devereaux, Ohio and Lincoln, are synonyms. I have no description of the Lincoln, and our vines here of that variety are only from cuttings of last spring, consequently too small for reference.

I am proud to see you in Missouri doing so much for Horticulture in these troublous times.

Yours very respectfully, WILLIAM SAUNDERS.

P.S.—I have taken a fancy to fill a photographic album with the portraits of Pomologists. Won't you send me the impression of your features for my book.

We have received a Descriptive Catalogue of Fruit and Ornamental Trees, for sale by George Baker, Toledo Nurseries, Toledo, Ohio. The Catalogue is very full and complete, and finely illustrated. Toledo is becoming to Ohio what Rochester is to New York in the tree trade. Mr. Baker is one of the leading nurserymen of the place.

We have received letters from various portions of Ill. and Mo. respecting the freeze of Jan. 1, and have published them in another column. We hope to hear further from other sections.

MISSOURI STATE HORTICULTURAL SOCIETY.—Just as we are about to go press with our February No., we are favored with quite an elaborate criticism of the proceedings of our recent State Horticultural Meeting. The author writes over the nom de plume of LACLEDE. The article is well written, and a spirit of honest intention prevades it, and some valuable hints, as we think, are suggested—we shall publish it against our established rule not to insert articles without the name of the author. Whatever will conduce most to the value and usefulness of our State Society, we wish to see adopted, and our pages are open to legitimate criticism of its proceedings.

NOTICE TO WOOL GROWERS.—The Wool Growers of Missouri and Illinois who desire to form an Association for the furtherance of their common interests, and for the consideration and discussion of the breeds and management of sheep, are requested to convene at the Courthouse in the City of St. Louis, on Wednesday, the 17th day of February, 1864, for the purpose of organizing such Association, and transacting such other business as may be brought before the meeting.

W. C. Flagg, Moro, Madison Co. Ill.; Richard Gentry, Sedalia, Pettis, Co. Mo.; Wm. Gill, Bunker Hill, Ill.; Dr. W. W. Henderson, St. Louis Co. Mo.; S. M. Ballinger, Macoupin Co. Ill.; David W. Bryant, Jefferson Co. Mo.; V. P. Richmond, Moro, Ill.; Mr. McNutt, Peevely, Mo.; Wm. Bodley, Upper Alton, Ill.; W. S. Jewett, Platin Rock, Mo.; Saml. Forman, Bethalto, Ill.; Rollin Clark, Edwardsville, Ill.; Wm. A. Lanterman, Paddock's Grove, Ill.; Wm. N. Mitchell, Alton, Ill.; C. G. McHatton, St. Louis Co. Mo.; Norman J. Colman, St. Louis, Mo.

SORGOH SHED.—As many inquiries are made for seed of the Sorgho or Imphee, we publish a letter from the Sorgho Machine Company, written in reply to an inquiry for seed best adapted to the prairie.

CIN. O., Jan. 23, 1864.

Dear Sir: In reply to your note of inquiry, we would answer: For planting Sorgho, 2 to 2½ lbs. per acre. On prairies east of you, we find the Imphee varieties best, as a rule—the Sorgho (Chinese) being disposed to run too much to woody fibre. Westward, as in Kansas, the Sorgho does better: and it may be questionable whether there the Sorgho or Oomseana (Imphee) is best. We would, however, in view of the uncertainty, recommend the latter. Sorgho is better for our hill country. The principal difference between the two kinds, Sorgho and Imphee, when they grow equally well, seems mainly in the greater tendency of the Imphee to granulate. One of our oldest operators this year made fine sugar from his whole crop of Oomseana.

Price for Sorgho—10 lbs. at 20 cents per lb. 10 to 40 lbs., at 15 cts. per lb. Oomseana (on heads) same. Our Oomseana seed is all of the crop above from which the sugar was made. Won't warrant that you will make sugar of all yours, however.

Truly Yours, CLARK SORGOH MACHINE CO.

What Subscribers Say.

ED. VALLEY FARMER: Inclosed I send you \$1 for the "Valley Farmer" for 1864. I am rather late subscribing. I suppose you will receive those that come in even at the "eleventh hour." We are having some cold weather; has frozen harder the past 10 days than it has been known to freeze since the settlement of this part of Kansas. I think you said you were fond of shooting prairie chickens. Come over, and shoot in my corn-field to your full content, both of heart and stomach. They thunder like pigeons when they rise. I'll quit for fear you will think I am writing to the "Farmer" instead of its Editor.

Yours truly, HARRISON ELLIOTT,
Le Roy, Coffey Co. Kan.

ED. VALLEY FARMER: Enclosed find one dollar in payment for the "Valley Farmer" for this year beginning with the January No. I find it a very interesting journal to read, and one which I think every farmer should take, though it is hard to make a great many of them think so. I don't expect to be engaged in farming for the next two years, as I have an office that will occupy nearly all my time, though I feel interested in reading the "Valley Farmer" just as much as if I did, from the fact I am yet quite young and just starting in the world, and therefore I want the information of those who have by experiments found out the best mode of cultivating the soil to produce the greatest yield to the cultivator.

The "Valley Farmer" contains information that no person who pretends to have a farm, an orchard or a garden should be without. I intend to have my Volume for 1863 bound so as preserve it for future reference. We are having an extremely cold winter so far. I fear there is going to be great scarcity of feed in this part of the State, owing to the early frosts which ruined a great many crops of corn entire, and damaged all more or less. Wishing for your success for the future, I subscribe myself, yours truly,

Keenville, Ill. JOHN KEEN, Jr.

[REMARKS.—Thank you for your letter. Like other people we like to have our labors appreciated. We think as you do, that it is not necessary to stop the paper because you have quit the farm for a couple of years, if you intend to go back again. You should read and study Agricultural and Horticultural Books and Journals to qualify yourself to farm with intelligence when you again commence. What would be thought of the lawyer, physician and minister, who should commence studying his profession only when he commenced practicing it? The farmer should qualify himself beforehand and be prepared to adopt every plan that saves labor, every system of cultivation that has proved most profitable and best preserved the fertility and productiveness of his land. In the culture of his land, in raising crops, in breeding and managing stock, in cultivating his orchard, fruit and vegetable garden, he has much to learn. Knowledge is indispensable to success, in the proper sense of that word, in any profession and we are glad to see that you appreciate the fact.]

ED. VALLEY FARMER: Is spring barley a paying crop? If so, where can it be had, and at what price? What time must it be sown? M. MYERS.
Mexico, Mo.

[You will not find spring barley a paying crop in this climate. Fall sown barley pays well, and before the season of sowing, we will give full directions for its profitable cultivation.]

QUERIES AND ANSWERS.

ED. VALLEY FARMER: Please inform me the price of Marrowfat Beans. If they can be bought, I would like to have you buy some for me and send them by express. Yours, C. H. A.

[REPLY.—We presume they can be had at the seed stores, of which there are two reliable ones—Plant & Brother, and Blunden, Koenig & Co. You can safely order from them, and they can collect the bill by express on delivery of goods. Any of our subscribers can order seeds or other goods in this manner, without remitting the money.]

ED. VALLEY FARMER: There is great inquiry for Osage Hedge Plants in this section. Being none raised here the last season, would like to know if any could be had south of this. JOSEPH ARMSTRONG, Princeville, Peoria Co. Ill.

[There are no Osage Orange plants to be had here. We think, perhaps, Prof. Turner, of Jacksonville, Ill., could supply you.]

ED. VALLEY FARMER: Are grape layers two years' old, too large to graft, and should the scions be of the same size?

MRS. H. CLEMSON.

[They are not too large to graft. Grape roots may be grafted at any age or size. The scions need not be of the same size as the stock. But the bark of the scion must be made to exactly join the bark of one side of the stock for the transmission of sap. Graft grapes as you do trees, only put the scions in the roots. Graft in Feb. and Mar.]

APPLES FOR KANSAS—Editor Valley Farmer: Intending to go to Kansas next year, and wishing to set out an orchard immediately after getting there. I desire to know the fruit adapted for the South part of the State. No doubt, the varieties adapted to the climate of St. Louis would do well for Southern Kansas. I have reference to the apples only. DAVID WEBER, SAVANNAH, IOWA,

[REPLY.—It is difficult to give a list without further particulars. We don't know how near you will be to market, nor whether you wish to market Summer, Autumn or Winter varieties, or Winter varieties only. We don't know whether you want early winter kinds or late keepers only. By reference to the discussions of the Missouri State Horticultural Society, to be found in the present number, and in succeeding numbers, you will probably get all the information you desire.]

ED. VALLEY FARMER: I wish to purchase a full-blooded Leicester or Cotswold buck, and a few ewes; would prefer the former. Can you tell me where I can get them in this State or Illinois. W. D. McD.

[Any of our readers who have them for sale, can write Mr. W. D. McDonald, A.A.G., St. Joseph, Mo.]

ED. VALLEY FARMER: Can the proceedings of the Mo. State Horticultural Society be had anywhere—if so, I would like to get them.

We have had a disastrous winter for fruit trees. I believe I have lost all my peach trees, which I set out four years ago. I have not examined all yet, but those I have are killed.

F. WILL.
Hopewell Furnace, Washington Co. Md.

[The proceedings of the Mo. State Horticultural Society will be published in pamphlet form in a few weeks, and notice will be given where they can be had.]

WANTED—A situation by a gardener who is competent in all branches of Horticulture. Would prefer to take charge of a respectable Nursery Establishment, or the management of Orchard, Small Fruit Plantation and Vineyard. Address, B. A., Eureka, St. Louis Co. Mo.

1t

The Cultivation of the CRANBERRY,

Is much more easy and successful in the common dry soil of private gardens, market gardens, or in field culture, than in the usual clumsy way in bogs and meadows. The yield this season, in my method of culture, was over 400 bushels per acre. Explicit directions for cultivation, with price of Cranberry plants and other useful and ornamental Trees, Plants, and Shrubs, will be sent by mail. B. M. WATSON,
3tfeb Old Colony Nurseries, Plymouth, Mass.

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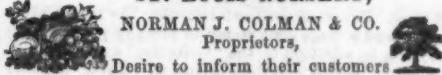
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THE HERALD OF HEALTH.—This sterling periodical, which has the largest circulation, and may be regarded as the most valuable Medical and Health Journal in the world, commences with the New Year its THIRTY-SEVENTH VOLUME. Many new features were introduced into the volume for 1863, and still greater improvements are promised for the forth-coming volume. It discusses with clearness, decision, and practical point, all matters pertaining to the Laws of Life, the Conditions of Health, the Nature and Causes of Disease, and the Theory and Practice of the Healing Art, according to the Hygienic System. It is the organ of the New York Hygeio-Therapeutic College. It is published monthly by R. T. TRAIL & CO., No. 15 Laight St., New York, at \$1.50 per annum in advance.

TREES! TREES!

ST. LOUIS NURSERY,



Desire to inform their customers and the public that they have an unusually large and fine stock, at

WHOLESALE AND RETAIL, OF

Fruit, Shade, and Ornamental Trees and Plants,

Which they will sell low on account of the hard times.

Examine our Prices.

	Each.	Hund.
APPLE TREES, 6 to 8 feet, extra fine,	\$0.20	\$15.00
PEACHES, best kinds,	25	20.00
PEARS, standards, best kinds, dwarfs,	50	40.00
CHERRIES, st. & dwarf,	50	40.00
APRICOT and NECTARINE, Splendid trees, first class,	40	
QUINCE, Angers, Orange and Portugal, fine,	40	30.00
GOOSEBERRIES, Each. Strong plants,	\$0.10	\$1.00
CURRENTS, Red and White,	10	1.00
BLACKBERRIES—Lawton, Dorchester & White,	1.00	4.00
RASPBERRIES—6 or more kinds,	1.00	5.00
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